PLACER COUNTY PLANT NURSERY ZONING TEXT AMENDMENT ENVIRONMENTAL IMPACT REPORT

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CHAPTER 1

INTRODUCTION

CHAPTER 1 INTRODUCTION

This Draft Environmental Impact Report (EIR) is an assessment of the impacts that reasonably could be expected from implementation of the proposed Placer County Plant Nursery Zoning Text Amendment (EIAQ-3710). The proposed project is the adoption of a series of amendments to the *Placer County Zoning Ordinance*, which will modify the ordinance as it relates to plant nurseries. The proposed changes to the ordinance include: new definitions of "plant nurseries," modification of the definition of "crop production," adding plant nurseries as a permitted use in the Residential-Agricultural and Residential-Forestry zone districts, adding a parking standard for retail nurseries, and adding a section in the specific use provisions portion of the ordinance. Appendix A of this EIR provides the pages of the *Placer County Zoning Ordinance* on which changes are proposed. Added text is printed in bold and deleted text is shown in strikeout.

1.1 Purpose

The California Environmental Quality Act (CEQA) requires that projects be evaluated for their possible effects on the environment. The Placer County Planning Department, as Lead Agency, has determined that the proposed text amendments to the *Placer County Zoning Ordinance* could have a significant effect on the environment and that an EIR shall be prepared for the project prior to any action on the proposed amendment.

The Draft EIR has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000, et seq.), CEQA Guidelines (14 California Administrative Code, Section 15000, et seq.) and Placer County's Environmental Review Ordinance. The Draft EIR is an informational document prepared to provide public disclosure of potential impacts of the project. As Lead Agency, the County "is responsible for the adequacy and objectivity of the draft EIR" [CEQA Guidelines, 15084(e)]. It is not intended to serve as a recommendation of either approval or denial of the project.

An EIR is an informational document which will inform public agency decision-makers and the public generally of the significant environmental effect of the project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency. [CEQA Guidelines, Section 15121(a)]

The Placer County Plant Nursery Zoning Text Amendment EIR provides an assessment of the impacts associated with ordinance implementation and presents the means and methods of reducing impact significance. This EIR finds that implementation of the amendments would result in potentially significant impacts, but all of these impacts could be mitigated to a less than significant level. None of the project's impacts have been determined to be significant and unavoidable, growth-inducing, or significant cumulative impacts.

The Zoning Ordinance applies to "all land uses and development within the unincorporated areas of Placer County" except for some areas in the Tahoe basin that are under the jurisdiction of community and general plans (*Placer County Zoning Ordinance* Section 17.02.030). Section 17.02.020B of the Zoning Ordinance states that the ordinance shall be "maintained so as to be consistent with the Placer County general plan and applicable community plans." Therefore,

this EIR considers the consistency of the proposed amendments with the Placer County General Plan as well as adopted community plans not excluded in Section 17.02.030. Copies of the related community plans and accompanying EIRs, as well as the Placer County General Plan and accompanying EIR, are available from the Placer County Planning Department at 11414 B Avenue, Auburn, California, 95603. In addition, the Placer County General Plan can be accessed on the Internet http://www.placer.ca.gov/planning/planning-docs.htm, and the *Placer County Zoning Ordinance*, Edition 7 (July 2002), can be accessed at http://ordlink.com/codes/placer/index.htm.

1.2 CEQA PROCESS

CEQA Statute

The California Environmental Quality Act was adopted in 1970 with the goal of protection of the environment.

It is the intent of the Legislature that all agencies of the state government which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian. [CEQA Statutes, Section 21000(g)]

This legislative intent is met through the preparation of comprehensive, multi-disciplinary analyses of environmental impacts. The analyses are required to disclose to decision makers and the public the significant impacts to the environment of proposed activities and to identify feasible alternatives and mitigation measures to avoid or reduce impacts. Section 21002 of the CEQA Statutes requires that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental impacts of such projects."

CEQA Guidelines

In addition to the requirements expressed in the CEQA Statutes, the State Office of Planning and Research developed the CEQA Guidelines (Guidelines) to provide direction to public agencies in the appropriate implementation of the CEQA Statutes. The Guidelines were adopted by the State Resources Agency at the direction of the Legislature, as expressed in Section 21083 of the CEQA Statutes. They are updated regularly in response to legislative amendments to the CEQA Statutes and changes in interpretations of CEQA based on judicial decisions. The Guidelines serve both advisory and regulatory roles. Some provisions express mandatory requirements, while some are advisory and open to interpretation.

CEQA Implementation

CEQA applies to all discretionary activities of public agencies. A discretionary activity is one in which the public agency has the authority to approve or deny issuance of permits or project approvals. Section 15002(i) of the Guidelines defines a discretionary action as one in which "a governmental agency can use its judgment in deciding whether and how to carry out or approve a project." In formulating the decisions of "whether and how" to act, the public agency must adhere to the CEQA requirements for evaluating the potential environmental impacts of the action. Section 21080(b)(1) of the CEQA Statutes states that CEQA does not apply to ministerial projects undertaken or approved by public agencies. Ministerial projects

are those in which the public agency must issue a permit or approval if the project is in compliance with agency rules and regulations. In these actions, the agency is required to act in a set way. For example, Placer County Building Department is required to issue a building permit for a construction project that complies with all codes and ordinances.

A primary goal of CEQA is to inform decision makers and the public of the potential environmental impacts of discretionary actions, and to disclose to the public the reasoning used by the agency to reach their decision. To facilitate this disclosure, both the CEQA Statutes and Guidelines establish requirements for public notice and review of CEQA documents. CEQA Statute Section 21105 requires that EIRs be available for review and/or purchase by any member of the general public, while Sections 15082, 15083, and 15087 of the Guidelines establish requirements for providing members of the general public with opportunities to review and comment on the scope and content of an EIR.

CEQA requires that governmental agencies establish standards and procedures by which to conduct the required environmental review of their actions. Placer County's Environmental Review Ordinance, Chapter 18 of the Placer County Code, serves this function. This ordinance requires that an Initial Project Application and Environmental Impact Assessment Questionnaire be completed for each proposed project. These documents provide the first level of environmental information and facilitate completion of the Initial Study, which is based on the Environmental Checklist Form found in Appendix G of the CEQA Guidelines. An Initial Study for the proposed Zoning Text Amendment was prepared in April 2003.

When the Initial Study identifies potentially significant environmental impacts of a proposed project or action, a Notice of Preparation (NOP) of an EIR is prepared pursuant to Section 15082 of the Guidelines. This document, which includes a description of the project and its probable environmental effects, is circulated to the public and to other agencies that may have jurisdiction over some aspect of the project or the resources that would be affected by the project. Typically, the Initial Study is included in the NOP. The public and agencies are thus provided the opportunity to comment on the scope and content of the EIR. Section 15084(c) of the Guidelines requires that "the Lead Agency must consider all information and comments received" from the general public and from other agencies. An NOP for the proposed project was circulated in April and May 2003.

Preparation of the EIR proceeds upon circulation of the NOP. The contents of the EIR are governed by Sections 21100 and 21100.1 of the CEQA Statutes and by Sections 15120 through 15132 of the Guidelines. In short, the EIR must present a description of the proposed project and the existing environmental setting of the project area; evaluation of the potential environmental impacts of the project, including cumulative impacts in the project vicinity; and consideration of mitigation measures and alternatives to the project that could avoid or reduce those impacts. The Draft EIR must be circulated for public and agency review prior to the Lead Agency adopting a decision on the project, as stipulated in Section 15087 of the Guidelines. Comments received during the public review period for the Draft EIR must be considered by the Lead Agency and a Response to Comments must be prepared for consideration by the decision making body. The Response to Comments becomes a part of the Final EIR, which may also include revisions to the text of the Draft EIR. There is no requirement for a formal public circulation and review period for the Final EIR. However, in Placer County, copies are sent to

those individuals or agencies that commented on the DEIR and it is available for public review for a minimum of ten days prior to its consideration by decision-makers.

1.3 Type and Purpose of the EIR

Guidelines Section 15161 defines a **project EIR** as one that "examines the environmental impacts of a specific development project," while a **program EIR** is intended to provide a broad and general analysis of environmental effects resulting from a large project, such as one that relates to the "issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program" [Guidelines Section 15168(a)(3)]. This EIR evaluates the environmental effects of the proposed project, which consists of amendments to the *Placer County Zoning Ordinance* and does not include any specific project. Therefore this EIR is a Program EIR. This EIR does not provide an exhaustive discussion of specific impacts related to individual operations of plant nurseries but provides a picture of the range of possible impacts and identifies mitigation measures that will ensure impacts are minimized or compensated for.

Programmatic Analysis

This EIR evaluates the reasonably foreseeable significant effects of the provisions in the proposed amendments and considers "broad policy alternatives and program wide mitigation measures" in accordance with Guidelines Section 15168(b)(4). Section 150168(c) states that use of a program EIR requires that "subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared." Adoption of the proposed amendments would establish new permitted land uses within some zone districts. Development of permitted land uses requires ministerial approvals from Placer County land development departments (i.e., issuance of grading and building permits) but does not require discretionary approvals (i.e., issuance of a use permit). As discussed above, projects requiring only ministerial approvals are not subject to the requirements of CEQA and would not require any environmental review in addition to this EIR. The proposed Zoning Text Amendment would also require use permits for certain land uses in particular zone districts. As the issuance of a use permit is a discretionary approval, projects undertaken pursuant to the proposed Zoning Text Amendment that require a use permit would be subject to subsequent environmental review.

Therefore this EIR evaluates the reasonably foreseeable environmental impacts of the anticipated future development permitted with ministerial approval under the proposed amendments and identifies appropriate mitigation measures that will ensure these impacts are minimized. As analysis of site-specific information for future development of projects requiring discretionary approvals is not feasible at this time due to the wide geographic scope of the proposed Zoning Text Amendment and the lack of any specific project associated with the proposed amendment, subsequent project-level review of discretionary development projects would be required.

Tiering

Guidelines Section 15152 encourages tiering in separate but related projects for the purposes of eliminating costly and time-consuming repetitive analysis of the same issues and ensuring adequate analysis. Section 18.20.120 of the County Code also encourages the use of tiering EIRs whenever feasible. Under these recommendations, the first tier EIR is expected to analyze all

reasonably foreseeable significant environmental effects of the project; however at a level of detail commensurate with the level of detail of the ordinance being analyzed. Guidelines Section 15152(c) recognizes that consideration of site-specific data may be infeasible in this first tier of analysis and affords the Lead Agency the ability to defer this analysis to a future environmental document in connection with a site-specific project.

Pursuant to the provisions related to program EIRs and tiering of analysis, this EIR has been written to analyze on a broad scale environmental impacts of the development that would be allowed under the proposed Zoning Text Amendment, anticipating that later project-level environmental review would be required for certain projects. These subsequent evaluations of environmental impact would incorporate the analysis of this EIR by reference and focus solely on issues that were not addressed in this EIR and are specific to each project requiring discretionary approval.

1.4 MITIGATION MONITORING AND REPORTING PROGRAM

Where appropriate, mitigation measures are identified in this EIR to avoid or reduce potentially significant impacts of the future development that could occur with adoption and implementation of the proposed Zoning Text Amendment. As the project consists of amendments to the *Placer County Zoning Ordinance*, but does not propose any specific construction at this time, development of any site-specific mitigation measures applicable to specific nursery projects will occur at the time of individual environmental review for those future projects subject to discretionary approval. Instead, this EIR relies on compliance with existing provisions of the Zoning Ordinance, other sections of the County Code, and standard County land development procedures as mitigation. By relying on existing provisions of the County Code, the County can ensure that future development allowed with ministerial approval under the proposed amendments will minimize environmental impacts.

Section 21081.6 of the CEQA Statutes requires that a Mitigation Monitoring and Reporting Program (MMRP) be adopted to ensure compliance with the mitigation measures in the EIR during project implementation. As this EIR relies on mitigation measures that are either in the County Code or part of the County's Development Review process, the County can monitor compliance with the mitigation measures through the ministerial permit processes, including:

- Design Review Committee Approval
- Improvement Plan Approval
- Improvement Construction Inspection
- Encroachment Permit
- Grading Permit Approval
- Building Permit Approval
- Certification of Occupancy

In the instance of future development projects permitted under the proposed Zoning Text Amendment, the ministerial issuance of development permits or the approval of improvement plans would be preceded by verification from County staff that each specific project complies with all applicable provisions of the County Code and other rules and regulations. No additional monitoring of the mitigation measures included in this EIR would be necessary for ministerial approvals. The text of each mitigation measure in this EIR identifies the code or regulation section where the measure is already codified and to which of the above listed ministerial approvals the mitigation measure would be applied.

In the instance of the larger development projects that would require a use permit or other discretionary approval under the proposed Zoning Text Amendment, it is anticipated that site-specific mitigation measures may be developed during the subsequent project-level environmental review of each project. These projects would also be required to comply with all mitigation measures included in this EIR. In accordance with the requirements of CEQA, an MMRP would be prepared as part of project-level review tiered off of this document.

1.5 Focus

The focus of this program EIR, as provided for in the Guidelines, is limited to those specific issues and concerns identified by Placer County as being possibly significant. The County prepared a Notice of Preparation (NOP) of an EIR, which provided a general description of the project and a preliminary evaluation of possible environmental impacts resulting from implementation of the proposed Placer County Plant Nursery Zoning Text Amendment. As no specific development is proposed at this time, the NOP and this EIR evaluate impacts of the proposed project on a broad scale rather than at the project-specific level. The NOP was circulated on April 16, 2003 to State agencies (via the State Clearinghouse) and local agencies and organizations. As noted in the Initial Study that accompanied the NOP to the State Clearinghouse, it is expected that environmental resource areas affected by the proposed project may include:

- Land Use
- Aesthetics
- Transportation and Circulation
- Air Quality
- Noise

- Biological Resources
- Utilities and Service Systems
- Hydrology and Water Quality
- Hazards and Hazardous Materials

The responses received during the NOP review period served to further refine the focus of the EIR. NOP comments were received from agencies (Placer County Water Agency and the Placer County Agricultural Commissioner), as well as many Placer County residents and several nursery operators in Placer County. The NOP and all NOP comments are available at Placer County Planning Department.

Issues Excluded from the EIR

In accordance with Guidelines Section 15128 and Section 31.618A of the Placer County Environmental Review Ordinance, the analysis in the Initial Study determined that the project does not have the potential to result in significant impacts in the resource areas listed below. No information was received subsequent to the public review of the NOP indicating that the conclusions reached in the Initial Study were incorrect; therefore, the issues described below are not discussed in the EIR.

Population and Housing

As indicated in the Initial Study, allowing plant nurseries in two Residential zone districts is not expected to lead to displacement of existing housing within these districts. Affordable housing stocks typically are not located in the zone districts likely to be most affected by implementation of the proposed amendments. No impacts to the number of housing units, especially affordable housing, will result from the proposed Zoning Text Amendment.

Geologic Problems

The analysis contained in the Initial Study found that no impacts to geologic resources are expected to result from the proposed project. Although grading is expected to be required as part of future specific plant nursery projects, it would be regulated by the *Placer County Grading Ordinance* and other sections of the County Code. Implementation of Best Management Practices as required by the *Placer County Land Development Manual* would ensure that grading and construction activities avoid the occurrence of significant impacts. It is expected that site preparation for plant nurseries would be similar to that necessary for crop production activities, which are currently allowed uses in all zones where it is proposed to allow Plant Production Nurseries. Site preparation for Plant Nurseries, Retail is expected to similar to that necessary for other retail development.

In commenting on the NOP for this EIR, the Granite Bay Community Association stated that they believe that "erosion of soils from wind or water" and "potential siltation of streams and lakes" could be potentially significant impacts resulting from the proposed project, requiring evaluation in the EIR. However, as stated above, compliance with County Code will be sufficient to ensure that soil erosion is minimized in all future development. Section 15.48.060 of the County Code states that no grading can be conducted without issuance of a grading permit from the Director of Public Works. Grading permits cannot be issued unless the proposed grading complies with the requirements of the *Placer County Grading Ordinance*, Article 15.48 of the County Code. Section 240.C of this article establishes the ability of the Director of Public Works to "impose any condition deemed necessary to protect the health, safety and welfare of the public, to prevent the creation of a hazard to public or private property, prevent erosion and to assure proper completion of the grading." Specifically, conditions may include any of the following:

- "1. Mitigation of adverse environmental impacts as disclosed by any environmental document findings. This includes the proper disposal of any hazardous material identified in the initial planning phase. The Director of Health and Human Services will approve hazardous materials management;
- 2. Improvement of any existing grading to comply with the standards of this article;
- 3. Requirements for fencing or other protecting of grading which would otherwise be hazardous;
- 4. Requirements for dust, erosion, sediment and noise control, and hours of operation and season of work, weather conditions, sequence of work, access roads and haul routes;

- 5. Requirements for safeguarding watercourses, whether natural or man-made, from excessive deposition of sediment or debris in quantities exceeding natural levels;
- 6. Requirements for safeguarding areas reserved for on-site sewage disposal;
- 7. Assurance that the land area in which grading is proposed and for which habitable structures are proposed is not subject to hazards of land slippage or significant settlement or erosion and that the hazards of flooding can be eliminated or adequately reduced;
- 8. Requirements for safeguarding existing water wells." (Section 15.48.240.C)

Based on the ability of the Director of Public Works to impose the conditions necessary to provide protection against wind and water erosion of soils (item 4 above) and against sedimentation and siltation of watercourses (item 5 above), these potential impacts will be evaluated on a project-by-project basis and will be adequately conditioned to ensure less than significant impacts occur. Additionally, the provisions of Section 15.48.360 require that a geotechnical investigation be prepared for any project that includes a cut or fill exceeding ten feet in depth. This requirement will ensure that projects involving substantial grading will be fully evaluated for their potential impacts related to erosion and waterway siltation.

Development review conducted as part of the Use Permit application for certain nursery projects, including Plant Production Nurseries with a growing area in excess of five acres, would include consideration of impacts related to grading and erosion. As such, these discretionary activities would allow the prevention of any impacts related to geologic problems at the time of issuance of permits.

Public Services

The proposed amendments would allow Plant Production Nurseries to be located in the zone districts that currently permit crop production uses. As indicated in the Initial Study, the proposed amendments to the *Placer County Zoning Ordinance* are not expected to result in the need for new or altered public services. The demands for public services for Plant Production Nurseries are similar to those of crop production uses, which are currently permitted in all affected zone districts. The demands for public services for Plant Nurseries, Retail are similar to demands for other commercial land uses, which are currently permitted in those zone districts where Plant Nurseries, Retail would be allowed under the proposed Zoning Text Amendment.

In commenting on the NOP for this EIR, the Granite Bay Community Association stated that traffic associated with plant nurseries is not the same as "annualized crop production" and therefore the proposed amendments will result in increases in demand for road maintenance services. The Community Association argues that the increase in demand for road maintenance could be a potentially significant impact of the project, requiring analysis in the EIR. Many different agricultural land uses are allowed under crop production and a variety of traffic patterns are associated with each. For example, tree shakers are used for some types of nut harvesting, high volumes of passenger cars are present during harvesting seasons at fruit orchards, and all forms of crop production rely on delivery trucks for supplies (such as chemicals, packaging materials). While plant nurseries are expected to have less seasonal variation in traffic generation than some other

types of crop production, the traffic generation for nurseries is not expected to be significantly different than traffic generation for the currently allowed uses, which include "production of grains, field crops, vegetables, melons, fruit, tree nuts, flower fields and seed production, ornamental crops, [and] tree and sod farms" (Placer County 2002). Please refer to Chapter 6 Transportation and Circulation for additional discussion of the traffic generation associated with plant nurseries in contrast with other types of crop production.

Cultural Resources

As above, the proposed amendments would amend the permitted land uses within zone districts that currently allow development. Therefore the adoption of the proposed Zoning Text Amendment would not change the amount or intensity of permitted development. Ministerial approval of development permitted under this proposed project would not increase the currently existing potential for impacts to cultural resources in the affected zone districts.

The proposed amendments would require that future Plant Production Nurseries obtain a Minor Use Permit if the "nursery stock growing area exceeds five acres." All Plant Nurseries, Retail and Plant Production, Plus Nurseries would be required to obtain a Minor Use Permit, except those in the C2, C3, HS, or IN zones. Development review conducted as part of the Use Permit application would include consideration of impacts to cultural resources. Placer County General Plan Policy 5.D.1 requires that discretionary development projects "identify and protect" important cultural resources, including paleontological and archaeological resources.

Recreation

Because the project would not generate any residential development, no impacts on recreational resources are anticipated.

1.6 ORGANIZATION

The Draft EIR text has been organized in conformity with Article 9, Contents of Environmental Impact Reports, Guidelines, Sections 15120 - 15132. The document consists of four principal sections: 1) the Introduction, Project Description, and Executive Summary; 2) the Environmental Analysis; 3) CEQA-mandated discussions of alternatives, growth-inducing impacts, and cumulative impacts; and 4) the Technical Appendices.

Following this Introduction, the Project Description provides an overview of the proposed Zoning Text Amendment, including the text of the Zoning Ordinance as proposed. The Project Description is followed by the Executive Summary, which provides a brief discussion of significant project impacts and a matrix presenting an overview of all project impacts and mitigation measures. The Environmental Analysis chapters comprise the greatest part of the document. For each environmental resource area (e.g., Land Use or Air Quality), these chapters provide the existing environmental setting and regulatory framework, an analysis of impacts, and proposals for mitigation measures as appropriate.

The remaining chapters of the document include CEQA Discussions (Growth-Inducing Impacts, Cumulative Impacts), Project Alternatives, MMRP, and References (EIR Preparers, Printed

References, Personal Communications, and Definitions of Acronyms). The Technical Appendices contain the proposed text changes to the *Placer County Zoning Ordinance*, NOP and comments on the NOP, correspondence, technical studies, and background reports that were prepared to complete this EIR.

1.7 DEFINITION OF TERMS

The EIR will discuss the significance of the project's environmental impacts. The following are definitions of the terms that will be used to denote these impacts:

No change: No change in existing conditions is anticipated if the project is implemented.

Less than Significant: No substantial adverse environmental change is anticipated. Mitigation for a less-than-significant impact is usually not necessary.

Potentially Significant: Substantial environmental change may result from implementing the project. Mitigation is proposed to reduce the magnitude of the impact.

Significant: Adverse environmental change is likely to occur. Mitigation is proposed to reduce the magnitude of this impact.

Significant and Unavoidable: Substantial adverse environmental change will occur. This impact cannot be avoided. While the magnitude may be reduced with implementation of mitigation, there is no feasible mitigation that would reduce the impact to a less than significant level.

The EIR includes mitigation measures intended to reduce identified impacts. As discussed in CEQA, Section 15370, these mitigations include:

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree of magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating or restoring the impacted environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensation for the impact by replacing or providing substitute resources or environments.

1.8 EIR PREPARATION

Preparation of the Draft EIR was accomplished through various analyses, research, and writing of North Fork Associates staff. Reference materials are listed in the Bibliography. Additional materials, such as correspondence, technical reports and background information, are included as technical appendices at the end of this report.

CHAPTER 2

PROJECT DESCRIPTION

CHAPTER 2 PROJECT DESCRIPTION

The Placer County Plant Nursery Zoning Text Amendment proposes a set of amendments to the *Placer County Zoning Ordinance* to alter the ordinance as it relates to plant nurseries. The proposed changes to the ordinance, which are shown in Appendix A of this EIR, include new and modified definitions of terms, designation of Plant Production Nurseries (those in which the primary activity is production of nursery stock) as allowed uses in zone districts where crop production is currently allowed, creation of a parking standard for Plant Nurseries, Retail, and creation of a new specific use provision section to provide additional clarification of zoning requirements related to plant nurseries. The proposed text amendments to the *Placer County Zoning Ordinance* would apply to the entire unincorporated county, with the exception of those unincorporated areas in the Lake Tahoe Basin that are governed by zoning and development ordinances specific to those communities. These areas are identified in Section 17.02.030 of the *Placer County Zoning Ordinance*.

2.1 PROJECT LOCATION

Located in northern California, Placer County includes 260,000 residents within its borders, which stretch across 964,140 acres. County communities include Roseville, Lincoln, Rocklin, Loomis, Auburn, Bowman, Foresthill, Colfax, Tahoe City, and Kings Beach. *Figure 2-1* provides a regional map of Placer County. There are diverse land uses within the county — from large commercial and residential urban areas in the west to rural and uninhabited portions in the Sierra Nevada Mountains and associated foothills. Agricultural production is primarily located in the west while timber production and forestry activities occur in the east.

The proposed amendments to the *Placer County Zoning Ordinance* would affect land throughout the unincorporated area of Placer County. As discussed throughout this EIR, it is expected that the majority of future nursery development under the proposed amendments would predominantly affect lands currently zoned as Residential-Agricultural, Residential-Forestry, or Farm. Generally, the areas in these zoning designations support rural land uses with low densities of development. Throughout unincorporated Placer County, there are 60,691 acres of land zoned Residential-Forestry, 44,165 acres of Residential-Agricultural land, and 182,835 acres of land with the Farm designation. The majority of the Residential-Forestry lands are located in the eastern portion of the county at elevations of 3,000 feet above mean sea level and greater. The majority of the Residential-Agricultural and Farm designated lands are in the western portion of the county, where elevations generally range from 165 to 3,000 feet. *Figure 2-2* shows areas of Placer County where the RA and RF designations occur.

2.2 PLACER COUNTY ZONING ORDINANCE

The first edition of the current *Placer County Zoning Ordinance* was initially adopted on July 25, 1995, as Chapter 17 of the Placer County Code. The Zoning Ordinance was most recently amended in July 2002 (Edition 7). The Zoning Ordinance establishes a code of regulations to "guide and manage the future growth of the county" (Section 17.02.010.A). It is the intent of the County Board of Supervisors to maintain the Zoning Ordinance, through the amendment process, to be consistent with the General Plan and applicable community plans (Section 17.02.010.B). In the case where a conflict occurs between the Zoning Ordinance and a

community plan, the Zoning Ordinance states that the provisions of the community plan shall take precedence over the Zoning Ordinance (Section17.02.050.D).

The Zoning Ordinance establishes specific use and development provisions for 22 zone districts in four land use categories — Agricultural, Resource & Open Space; Commercial; Industrial; and Residential, as listed in *Table 2.1*. Section 17.54 of the Zoning Ordinance provides general development regulations that are applicable to most development throughout the county, including parking standards, height limitations, and setback requirements.

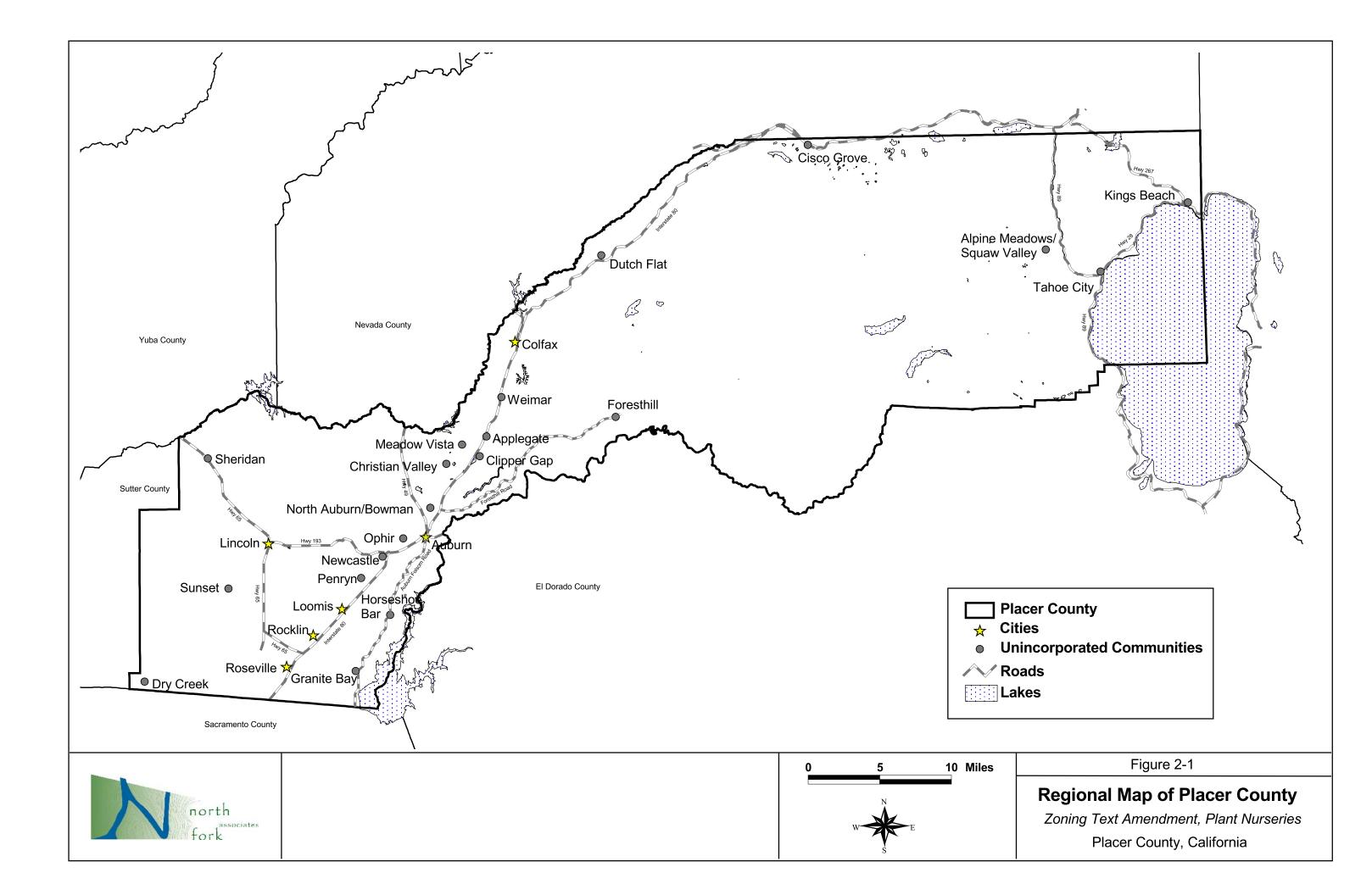
Table 2.1 Placer County Zone Districts

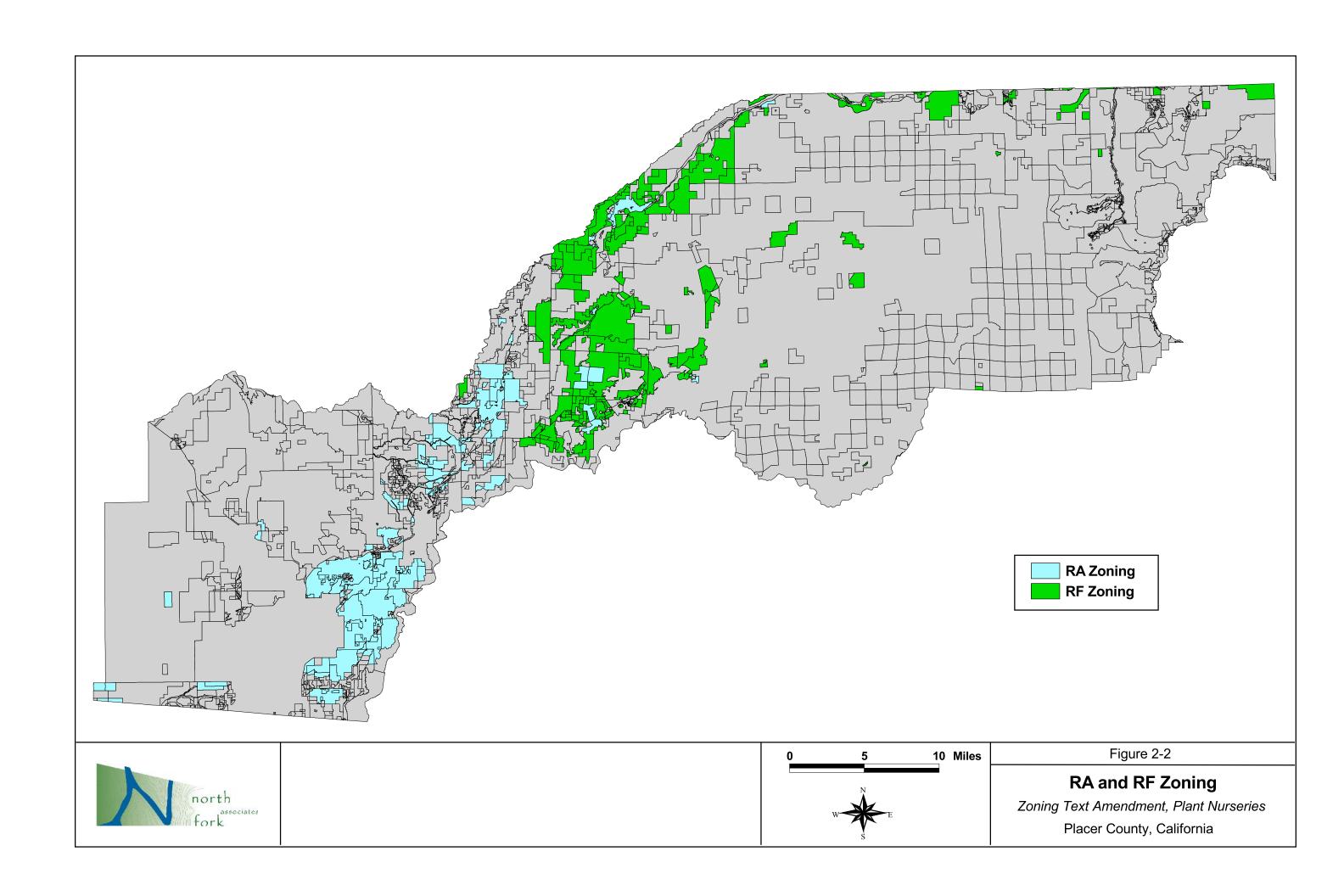
Land Use Category	Zone District	District Abbreviation
	Agricultural Exclusive	AE
	Farm	F
Agricultural, Resource	Forestry	FOR
and Open Space	Open Space	0
	Timberland Production	TPZ
	Water Influence	W
	Neighborhood Commercial	C1
	General Commercial	C2
	Heavy Commercial	C3
Commercial	Commercial Planned Development	CPD
Commercial	Highway Services	HS
	Motel District	MT
	Office and Professional	OP
	Resort	RES
	Residential Single-Family	RS
Residential	Residential Multi-Family	RM
Residential	Residential-Agricultural	RA
	Residential-Forest	RF
	Airport	AP
Industrial	Business Park	BP
เทนนร์เกลเ	Industrial	IN
	Industrial Park	INP

Source: Placer County Zoning Ordinance 2002

2.3 GENERAL AND COMMUNITY PLANS

The most recent version of the *Placer County General Plan* was adopted in 1994. The County presents the General Plan as containing two types of documents: the *Countywide General Plan*, which establishes goals and policies to govern development throughout the county, and a set of *community plans*, which provide a more specific focus on development within identified community area boundaries. Placer County has approximately 25 community plans.





The proposed Zoning Text Amendment would affect those community plan areas that have affected zone districts within their boundaries. All of the 25 community plans within the county include at least some of the zoning designations affected by the proposed project, and the potential impacts on all zone districts will be evaluated on a county-wide basis in this EIR, including analysis of the proposed amendments consistency with the provisions of the *Placer County General Plan*. As is discussed in Section 2.5 of this chapter, the zones where the greatest potential for significant impact occurs are the two residential zones affected by the proposed project, the RA and RF zones. The potential for impacts is greatest in these zones due to the potential mixing of residential land uses with commercial activities associated with agricultural land uses.

Several of the community plan areas include small amounts of RA or RF zoning, therefore the potential impacts from implementation of the proposed Zoning Text Amendment within those areas are expected to be less than significant; however, a few community plan areas consist of a greater proportion of parcels zoned RA or RF. Specifically, these plans include:

- Auburn/Bowman Community Plan (1994)
- Foresthill General Plan (1981 currently being updated)
- Granite Bay Community Plan (1989)
- Horseshoe Bar/Penryn Community Plan (1994)
- Meadow Vista Community Plan (1996)
- Dry Creek West Placer Community Plan (1990)

This EIR relies on the provisions of the General Plan and the six community plans listed above to evaluate the consistency of the proposed Zoning Text Amendment with existing planning goals and policies of the County.

2.4 PROJECT OBJECTIVES

The Placer County Planning Department has identified the following objectives for the Plant Nursery Zoning Text Amendment:

- 1) Provide expanded definitions of "plant nurseries," with a distinction between "plant production," "plant production, plus," and "retail" nurseries.
- 2) Allow Plant Production Nurseries to be located in the zone districts where crop production is a permitted use.
- 3) Require "Plant Production, Plus Nurseries" to comply with the requirements for Plant Nurseries, Retail, or to obtain a use permit in any zone where Plant Production Nurseries are permitted and Plant Nurseries, Retail are not permitted.
- 4) Require a use permit for Plant Production Nurseries in the Residential-Agricultural and Residential-Forest zone districts when the nursery stock growing area exceeds five acres.
- 5) Allow Plant Nurseries, Retail to be located in the General Commercial, Heavy Commercial, Highway Services, and Industrial zone districts.

- 6) Require use permits for Plant Nurseries, Retail located in the Forestry, Neighborhood Commercial, Office Professional, and Industrial Park zone districts.
- 7) Create parking standards for Plant Nurseries, Retail.

The proposed Zoning Text Amendment would establish new definitions related to plant nursery land uses, and would establish Plant Production Nurseries as an allowed use within many zone districts. Plant Production, Plus Nurseries and Plant Nurseries, Retail would either be prohibited or require a use permit in most zone districts. They would be allowed uses in four zones.

2.5 PROJECT DESCRIPTION

Each component of the proposed Zoning Text Amendment is discussed in detail in this section. Each actual page of the Zoning Ordinance that is proposed for amendment is included in Appendix A of this EIR. A summary of the primary amendments proposed is provided in *Table 2.2.* (Refer to *Table 2.1* of this EIR for a list of zone districts and their abbreviations.)

Table 2.2 Amendments Summary

Land Use Definitions		Provisions under existing ZO	Proposed provisions
Replace existing definition of plant nursery with three new ones	Plant Production, Plus Nursery: Engaged in production and sales of stock as well as sales of accessory items	No specific provisions, generally treated as Plant Nursery, Retail.	In zones where retail nurseries could locate, this nursery would follow the permit requirements of retail nurseries – ministerial approval in C2, C3, HS, and IN zones, Minor Use Permits in C1, INP, AE, F, and FOR zones, and a Conditional Use Permit in CPD. In other zones where plant production nurseries would be allowed (and there is no retail provision), this nursery would require a Minor Use Permit.
	Plant Nursery, Retail: Primarily engaged in retail sales of nursery stock and accessories.	Follows provisions of "plant nurseries" land use, defined as "commercial agricultural establishments" engaged in production and/or sale of nursery stock and related products.	Designations of permit requirements would not change from existing Zoning Ordinance. Retail nurseries require ministerial approval in C2, C3, HS, and IN zones, Minor Use Permits in C1, INP, AE, F, and FOR zones, and a Conditional Use Permit in CPD.

Land Use Definitions	Provisions under existing ZO	Proposed provisions
Plant Production Nursery: primarily engaged in production of nursery stock and sales of stock only (no accessory sales).	No specific provisions, follows provisions of "crop production" per the inclusion of "flower fields and seed production, ornamental crops, tree and sod farms" in the definition of crop production. Crop production is an "allowed" use (no discretionary approvals needed) in the RA, RF, C1, C2, C3, CPD, HS, OP, RES, AP, BP, IN, INP, AE, F, FOR, O, and TPZ zones.	Designation as an allowed used in the same zones as crop production RA, RF, C1, C2, C3, CPD, HS, OP, RES, AP, BP, IN, INP, AE, F, FOR, O, and TPZ. Would require a Minor Use Permit in the RA and RF zones if the growing area exceeds five acres.

Changes to Definition of Terms

Section 17.04.030 establishes the definitions of terms used within the Zoning Ordinance. The proposed amendments would expand the existing definition of "Crop Production;" replace the existing definition of "Plant nurseries" with new definitions of "Plant Production, Plus Nurseries," "Plant Nurseries, Retail," and "Plant Production Nursery;" and modify the existing definition of "Greenhouses." This section discusses the proposed changes to the definitions listed below. Current definitions are in *italics*. The proposed new language of the Zoning Text Amendment is presented in **bold**. Proposed deletions are shown as strikethrough text.

Current Definition of Plant Nurseries

The current Zoning Ordinance text defines nurseries as: "Plant nurseries" (land use) Commercial agricultural establishments engaged in the production of ornamental plants and other nursery products (e.g., wholesale and retail nurseries) and commercial scale greenhouses (home greenhouses are included under "Residential Accessory Uses.") The sale of houseplants or other nursery products entirely within a building is also included under "Retail Stores, General Merchandise." This definition is proposed for deletion.

Proposed Definitions of Plant Nurseries

The proposed Zoning Text Amendment would create three new definitions of nurseries, as follows:

"Plant Production, Plus Nurseries" (land use) means commercial establishments engaged in buying, displaying and selling containerized and non-containerized, horticultural, ornamental and nursery stock primarily on-site and non-plant nursery products as an accessory use to the primary use. Such nursery operations may involve the application of fertilizers, pesticides herbicides, as well as other appropriate agricultural management practices. What about production of plants?

"<u>Plant Nurseries, Retail</u>" means commercial establishments engaged in the sale of ornamental plants, other nursery products, grown under cover or outdoors, garden accessories, garden equipment, and garden or landscape supplies. The sale of houseplants or other nursery products entirely within a building is also included under "Retail stores, general merchandise."

"<u>Plant Production Nursery</u>" A type of crop production. Production of all types of nursery stock and ornamental plants with no accessory sales. See "Crop Production," "Plant Production, Plus Nurseries," and Section 17.56.165.

Current and Proposed Definition of Crop Production

"Crop Production" (land use) means Agricultural and horticultural uses including but not limited to production of grains, field crops, vegetables, melons, fruits, nut trees nuts, herbs, flowers, fields and seed production, nursery stock and ornamental plant production (including those plants, trees, shrubs, and ground covers grown in containers, green houses, [See section 17.56.180(C)(3) for applicable regulations] shade structures, undercover and in the ground) [Plant Production Nurseries, that is the production of all types of nursery stock and ornamental plants, are subject to separate requirements and permit(s)] crops, tree and sod farms, associated crop preparation services and harvesting activities including, but not limited to, mechanical soil preparation, irrigation system construction, spraying, crop processing and sales of the agricultural crop only. (See Section 17.56.165) in the field not involving a permanent structure.

Current and Proposed Definition of Greenhouses

"Greenhouses" means agricultural or residential accessory structures with transparent or translucent roof and/or wall panels intended for the raising of plants. Section 17.56.180 contains the standards for greenhouses. See also "Plant nurseries" Section 17.56.165.

Changes to Specific Zone Districts

Section 17.06.050 of the Zoning Ordinance provides a matrix of the allowable uses and permit requirements for each type of land use in each zone district. The proposed changes regarding allowable uses and permit requirements for plant nurseries are summarized below and shown in Appendix A. Crop production is currently an "Allowed Use" in 18 zone districts: RA, RF, C1, C2, C3, CPD, HS, OP, RES, AP, BP, IN, INP, AE, F, FOR, O, and TPZ. No changes to the designations of the permissibility of crop production are proposed. "Plant nurseries" are currently permitted with zoning clearance in the C2, C3, HS, and IN zone districts; permitted with a Minor Use Permit in the C1, INP, AE, F, and FOR zones; and permitted with a Conditional Use Permit in the Commercial Planned Development (CPD) zone. Under the proposed project, these designations would apply only to Plant Nurseries, Retail.

Upon implementation of the proposed Zoning Text Amendment, Plant Production Nurseries, as defined above, would be allowed in the zones which currently allow crop production. As above, these are: RA, RF, C1, C2, C3, CPD, HS, OP, RES, AP, BP, IN, INP, AE, F, FOR, O, and TPZ. However, if the nursery stock growing area exceeds five acres within the two residential zones (RA and RF), a Minor Use Permit will be required. Plant Production, Plus Nurseries will require a Minor Use Permit in the zones where Plant Production Nursery land uses are permitted, unless a different permit requirement exists for a Plant Nursery, Retail. In that case, a Plant Production, Plus Nursery would need to meet the requirements for a Plant Nursery, Retail.

Parking Standard

Currently, the parking standard for "plant nurseries," as established in Section 17.54.060 requires one parking space for every 2,000 square feet of land area. With the proposed Zoning Text Amendment, this parking standard would apply specifically to Plant Nurseries, Retail.

Existing parking standards for retail land use types would not change. For example, sales of nursery products require one parking space for every 1,500 square feet of area used for nursery product sales, and outdoor retail sales operate under the parking standards required for seasonal sales and/or "as required for principal use for other outdoor sales."

Specific Nursery Regulations

The proposed Zoning Text Amendment includes creation of a new section, Section 17.56.165, within **Division VII – Specific Use Regulations**. Article 17.56 is intended to "establish special standards for certain land uses that may affect adjacent properties, the neighborhood, or the community, even if the uniform zoning standards" are applied. The proposed Section 17.56.165 would govern the development of plant nurseries. Subsections A, B, and C present specific provisions for each type of nursery as defined in the proposed amendments to Section 17.04.030 of the Zoning Ordinance. The proposed text of the new section is in **bold** below.

17.56.165 Plant Nurseries

The production of nursery stock is recognized as a valuable segment of the County's agricultural economy. It is a type of crop production and defined as such herein. Due to the variability in the type of plant production operations and plant nursery operations, as well as the differing geographic areas of the County where such uses may be proposed, "Plant Production Nurseries" and "Plant Nurseries, Retail" are subject to separate requirements and permits as specified herein and in Section 17.06.050.

- A. "Plant Nurseries, Retail", where little, if any, plant production is done onsite, and where the primary operation is the sale of plants and related garden equipment supplies and accessories is permitted as specified in Section 17.06.050 zoning charts.
- B. "Plant Production Nurseries," a type of crop production, is permitted in all zone districts which permit crop production, except that in the Residential-Agricultural (RA) and Residential-Forest (RF) zone districts, a Minor Use Permit is required if the nursery stock growing area exceeds five acres. (The area would be measured by drawing the smallest polygon around the area where the nursery products are grown and measuring the area of that polygon).
- C. "Plant Production, Plus Nurseries." A Plant Production, Plus Nursery is a commercial establishment engaged in buying, displaying, and selling containerized and non-containerized, horticultural, ornamental, and nursery stock produced primarily on-site and non-plant nursery products as an accessory use to the primary use. Such nursery operations may involve the application of fertilizers, herbicides, and well as other appropriate agricultural management practices.

A plant nursery of this type is permitted and shall require the approval of a Minor Use Permit in any zone where a "Plant Production Nursery" is permitted unless a "Plant Nursery, Retail" use is permitted subject to a different permit requirement, in which case the permit requirement for the "Plant Nursery, Retail" use shall apply (See proposed definitions language above).

The essential differences between the three types of nurseries relates to the types of activities expected to occur onsite. Plant Nurseries, Retail are primarily engaged in selling plants and gardening accessories to the general public. Some plant production may also occur onsite, but as an accessory to the primary retail use. Such plant production activities are not considered a form of crop production. These nurseries are expected to generate land use and environmental impacts similar to other retail businesses.

Plant Production Nurseries are those that grow plants in the ground, in containers, and/or in greenhouses. Onsite sales are limited to plants and seeds. No accessory sales are allowed. These nurseries are expected to generate land use and environmental impacts similar to other agricultural crop production activities, with seasonal fluctuation in intensity of land use, use of heavy equipment, and demand for utilities and services. Other land uses with similar impacts to Plant Production Nurseries that are allowed under the current and proposed Zoning Ordinance definitions of "crop production" include ranches, nut tree farms, and fruit orchards and fields.

Plant Production, Plus Nurseries are those engaged in both plant production and sales (wholesale and/or retail). Sales are not limited to plants, but may also include sales of accessory items such as pots, soil, soil amendments, and gardening tools. These nurseries generate impacts similar to those of Plant Production Nurseries, with additional impacts related to the onsite sales activities. While the onsite plant production that would occur at a Plant Production, Plus Nursery is considered "crop production," the sales activities are not included in the definition of crop production. Thus Plant Production, Plus Nurseries are subject to more stringent requirements than Plant Production Nurseries.

2.6 IMPLEMENTATION OF THE PROPOSED PROJECT

The reasonably foreseeable environmental impacts that could result from adoption and implementation of the proposed amendments to the *Placer County Zoning Ordinance* are evaluated in this EIR. The Placer County Board of Supervisors will review the proposed amendments and this EIR as part of their decision of whether or not to adopt the amendments, and public hearings to receive comments on the EIR and the proposed project will be held. Should the Board of Supervisors adopt the proposed amendments, they would take effect in approximately 45 days.

Subsections (C) and (D) of Section 17.02.030 recognize that the adoption of amendments to the Zoning Ordinance can result in the imposition of different standards on new development than were imposed on existing or previously approved development. This code section establishes the right of previously approved or existing development to continue to operate under the "regulations and requirements in effect at the time the [project] application was accepted as complete." The regulations and requirements of the proposed Zoning Text Amendment would be applied to existing development only "where an alteration, expansion or modification to an existing use is proposed, and except as provided by Sections 17.60.120, et seq. (Nonconforming Uses)."

2.7 REASONABLY FORESEEABLE DEVELOPMENT OCCURRING AS A RESULT OF THE PROPOSED PROJECT

Should the proposed Zoning Text Amendment be adopted, it would alter the permit requirements for development of some agricultural and commercial land uses within residential, industrial, and agricultural land use zone districts. Based on a review of the annual Agricultural Crop Reports prepared by the Placer County Agricultural Commissioner's office, if growth patterns between 1970 and 2001 hold steady, the County expects development of 156 acres of plant nurseries over the next eighteen years. In 1970, sales (wholesale and retail) of products from plant nurseries accounted for under \$1,000,000 in revenue within Placer County. By 2001, the revenues from nursery sales had grown to \$13,000,000 and there were 208 acres of land within Placer County that were devoted to plant nurseries. Using the growth in revenues observed between 1970 and 2001, it is expected that plant nursery sales will generate \$21,000,000 in sales by 2020. If 208 acres can support \$13,000,000 in sales, it is reasonable to assume that 364 acres will be necessary to support \$21,000,000 in sales. This corresponds to an estimated 156-acre increase in land devoted to plant nurseries.

Based on the availability of suitable land for plant nurseries within the County, it is expected that the majority of growth in land devoted to plant nurseries would occur within the RA and F zones. This is because the RA and F zones occur primarily in the western and central portions of Placer County, where the topography and climate are more suitable to nursery operations. As discussed in Chapter 4 Land Use, criteria considered in locating a new nursery land use include access to sun, limits on ground slope (typically no more than 5%), reliable supply and quality of water and energy, and proximity to transportation facilities. These characteristics are found more easily in western Placer County than in eastern portions of the county. Additionally, the western and central areas of the county support greater population densities than eastern Placer County, indicating that the market for nursery stock and products will be greater in the western and central areas. Lands zoned RF are more frequently located in the central and eastern portions of the county, primarily around the community of Foresthill and extending north and east of that community. Nursery operations in the RF zone are anticipated to primarily consist of tree farms due to the topography, climate, and natural vegetation communities present in the areas with RF zoning.

Plant Nurseries, Retail

Currently, Plant Nurseries, Retail are permitted to locate in several commercial and industrial zone districts, usually with a requirement for a use permit. Plant Nurseries, Retail are not allowed or proposed to be allowed within any residential zone district. They would continue to require a Minor Use Permit in the C1, INP, AE, F, and FOR zones and a Conditional Use Permit in the CPD zone. Plant Nurseries, Retail are permitted without a use permit in the C2, C3, HS, and IN districts. No changes are proposed to these requirements for Plant Nurseries, Retail, therefore forecast growth rate of Plant Nurseries, Retail is not expected to change as a result of the proposed project.

Plant Production, Plus Nurseries

Plant Production, Plus Nurseries will follow the same requirements for Plant Nurseries, Retail in the zones where retail nurseries are allowed. In other districts where Plant Production Nurseries are allowed, Plant Production, Plus Nurseries will be required to obtain a Minor Use

Permit. Therefore, Plant Production, Plus Nurseries will require a use permit in all zones where they are allowed except the C2, C3, HS, and IN zones. These zone districts allow general and heavy commercial and industrial land uses, including many retail trade and service uses, and some manufacturing and processing uses.

Currently, the Zoning Ordinance contains no specific provisions for the development of Plant Production, Plus Nurseries. By including such requirements in the proposed project, it is anticipated that the amendments will encourage some development of this land use type, which combines crop production activities with wholesale and/or retail sales. Sales permitted at a Plant Production, Plus Nursery include sales of the plant crops as well as accessory items such as pots, equipment, soil, and soil amendments.

Plant Production Nurseries

The proposed amendments would allow Plant Production Nurseries within all zone districts that permit crop production, including two residential districts, many commercial districts, all industrial districts, and all agricultural/resource/open space districts except "Water Influence." Crop production is closely related to nursery plant production, as both land uses require similar operations and practices. The proposed definition of "Crop production" includes "processing and sales of the agricultural crop." This would accommodate the sales of the nursery stock grown at a plant production nursery, but not the sales of accessory items. The proposed amendments would require the issuance of a Minor Use Permit for Plant Production Nurseries within the RA and RF zones if the "nursery stock growing area exceeds five acres." No other requirements for use permits for Plant Production Nurseries are proposed.

2.8 ANTICIPATED IMPACTS OF THE PROPOSED ZONING TEXT AMENDMENT

The proposed amendments involve the regulation of land uses and do not include any specific development project. Therefore this EIR provides a programmatic analysis of the anticipated impacts of the proposed Zoning Text Amendment. This analysis considers the general countywide impacts to land use, the environment, and public infrastructure that could result from development of new plant nurseries under the proposed Zoning Ordinance language. No site-specific impacts of existing or new development are included in a programmatic analysis. As discussed above, many new plant nurseries will require issuance of a use permit. The use permit process includes additional environmental review pursuant to CEQA and allows for the implementation of site-specific mitigation measures to avoid, minimize, or compensate for individual project impacts.

All potential environmental impacts of the proposed Zoning Text Amendment are evaluated in the following chapters of this EIR. In general, most potentially significant impacts would be minimized by the structure of the proposed amendments, through the requirements for the issuance of use permits for a substantial portion of the anticipated future development. As discussed above, plant nursery development in Placer County within the next fifteen years is anticipated to use approximately 156 acres. This small amount of development is not expected to result in any significant impacts that cannot be mitigated. Potentially significant impacts requiring mitigation include incompatibilities between neighboring land uses, increases in light and glare, pesticide use and its effect on air quality, noise impacts on existing land uses, impacts

to biological and water resources through increased disturbance of natural lands and the use of pesticides and fertilizers, and potential exposure of people to hazardous materials.

Due to land suitability, proximity to sales market, and availability of transportation facilities, it is expected that the majority of the development of nurseries that primarily produce nursery stock will occur in the areas designated in the *Placer County Zoning Ordinance* as Farm (F) and as Residential Agriculture (RA).

Impacts related to Plant Nurseries, Retail as defined in the proposed amendments are expected to remain the same as currently anticipated under the existing Zoning Ordinance. This is because the proposed project includes no changes in the permissibility of Plant Nurseries, Retail. Therefore no major changes in development patterns for this type of nurseries are expected. Other than in the C2, C3, HS, and IN zones, the Zoning Ordinance would continue to require new Plant Nurseries, Retail to obtain a use permit and conduct project specific environmental review.

Subsequent environmental review for Plant Production, Plus Nurseries is expected to occur based on the use permit requirements for this type of nursery in most zones. Plant Production, Plus Nurseries combine the agricultural land use of plant production with a commercial component. Under the proposed project, this type of nursery could locate in the RA (Residential Agricultural) and RF (Residential Forestry) zones upon issuance of a use permit. Establishment of new commercial activities within a residential zone can result in land use conflicts related to noise, air quality, traffic, and hazardous materials. However, the required issuance of a use permit and project specific environmental review for a Plant Production, Plus Nursery in any zone where they might locate other than C2, C3, HS, and IN zones would allow for site-specific mitigation of any potentially significant impacts. Potential impacts of this nursery type in the C2, C3, HS, and IN zones are expected to be less than significant due to the similarity between land use impacts of Plant Production, Plus Nurseries and other land uses currently allowed in these zones (i.e., Plant Nurseries, Retail, manufacturing, and processing). Program level impacts of development of this type of nursery have been identified and mitigated in this EIR.

The proposed project would create a definition of Plant Production Nurseries and allow this nursery type to develop without issuance of a use permit in all zones where crop production is a currently allowed land use. Allowing Plant Production Nurseries in commercial, industrial, and agricultural/resource zones is not expected to result in significant impacts as the other land uses allowed in those zones have some similar land use characteristics to crop production activities. Noises, odors, traffic, and daily operations associated with plant production nurseries would be less than those associated with many other commercial, industrial, and agricultural land uses. However, allowing Plant Production Nurseries to locate in the RA and RF zones could result in conflicts between new plant nurseries and existing residential land uses. The impacts of plant nurseries on existing residences could include increases in traffic and traffic safety hazards, generation of air pollutants and odors, increases in noise levels, and creation of potential to expose residents to hazardous materials. These impacts are all evaluated in the subsequent chapters of this EIR.

CHAPTER 2	PROJECT D	DESCRIPTION
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CHAPTER 3

EXECUTIVE SUMMARY

CHAPTER 3 EXECUTIVE SUMMARY

This summary chapter is provided in accordance with State CEQA Guidelines Section 15123. As stated in the State CEQA Guidelines Section 15123(a), "[a]n EIR shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical." State CEQA Guidelines Section 15123(b) states, "[t]he summary shall identify: (1) Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; (2) Areas of controversy known to the Lead Agency including issues raised by agencies and the public; and (3) Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects." Accordingly, this summary includes:

- Summary of the proposed project,
- Significant effects of the project,
- © Cumulative impacts,
- Areas of known controversy and issues raised,
- Environmental setting for impact analysis,
- Alternatives to the proposed project, and
- Summary of environmental impacts and mitigation measures.

3.1 SUMMARY OF THE PROPOSED PROJECT

The proposed project would amend the Placer County Zoning Ordinance as it relates to the siting, development, and operation of plant nurseries throughout the County. The proposed Zoning Text Amendment includes:

- 1) delete the existing definition of plant nurseries and replace it with definitions for three types of nurseries
- 2) modify the existing definition of crop production to clarify that production of plant nursery stock is a form of crop production
- 3) establish use permit requirements for each type of plant nursery.

3.2 Areas of Known Controversy and Issues Raised

CEQA requires that the EIR "identify areas of controversy" that have been raised by either the public or public agencies (Section 15123, CEQA Guidelines). The comments received on the NOP and conversations with Placer County staff identified the following potential areas of controversy associated with the proposed project:

- Land use compatibility;
- Economic and social effects of commercial activities occurring in residential zones;
- Impacts to the aesthetic qualities of residential areas;
- Increases in amount of equipment traffic (tractors, harvesting machinery) on rural and/or residential roadways;

- Air pollution resulting from use of agricultural equipment, burning of green waste, use of pesticides and fertilizers, and traffic;
- Unpleasant odors, potential health impacts, and risks related to fire hazards associated with composting;
- Increases in noise levels in noise-sensitive areas (i.e., residential areas), especially with potential for overnight operations;
- Soil erosion and siltation of drainageways associated with land development;
- Impacts to water quality, especially related to use of pesticides and fertilizers;
- Water usage and conservation of water supplies; and
- Use and potential for accidental release of hazardous materials.

3.3 Environmental Setting for Impact Analysis

CEQA Requirements

Both the CEQA Guidelines and CEQA case law provide relevant provisions for determining the appropriate baseline from which environmental impacts should be evaluated. The CEQA Guidelines indicate that the baseline for environmental impact analysis is normally the environmental conditions existing at the time of the NOP, which usually represents the beginning of the environmental review of the project. A 1999 court case provided additional guidance about the appropriate definition of the baseline. In the January 1999 CEQA court case, Fairview Neighbors v. County of Ventura et al. (2d Civil No. B10456, January 28, 1999), the Second District Court of Appeals determined that the appropriate baseline for evaluation of traffic and related environmental impacts of the proposed Transit Mixed Concrete Company aggregate mine expansion was the operational limit set in the mine's current conditional use permit (CUP). Therefore, where a permit limit that has been subject to prior CEQA review exists for a proposed project, it is appropriate to use that limit as the environmental baseline, because operation up to that limit is already permissible. Similarly, when considering an amendment to the rules which govern ongoing development, it is appropriate to use the anticipated level of development under the existing rules and regulations as the baseline for evaluation of impacts associated with the level of development anticipated under the proposed amendment.

Baseline Condition for this EIR

The baseline condition for this EIR is considered to be the continued development of plant nurseries under the existing provisions of the *Placer County Zoning Ordinance*. As discussed in **CHAPTER 2 PROJECT DESCRIPTION**, the anticipated future development of plant nurseries is based on the historic trends in land devoted to plant nurseries and the revenue generated by the sale of nursery products. Under either the existing Zoning Ordinance or the proposed Zoning Text Amendment, approximately 156 acres of additional development of plant nurseries in Placer County is expected to occur. Therefore, this EIR focuses on the change in the pattern of development of different types of plant nurseries in various zone districts.

3.4 SIGNIFICANT EFFECTS OF THE PROJECT

Implementation of the project would result in various impacts on the environment as described in this EIR. None of the impacts associated with implementation of the proposed Zoning Text Amendment are considered significant impacts after implementation of the mitigation measures. Levels of significance both before and after mitigation, and suggested mitigation measures are identified for all impacts in *Table 3.1*, at the end of this chapter. (For detailed discussions of impacts and suggested mitigation measures of specific topic areas, refer to the relevant chapters of this EIR).

This report concludes that the following impacts are considered significant or potentially significant *before* implementation of mitigation measures:

- Land Use Incompatibility,
- Substantial Degradation of Existing Visual Character of a Project Site and/or Adjacent Lands.
- Substantial Increase in Light and Glare,
- Exposure of People to Toxic Air Contaminants,
- Substantial Temporary Increases in Ambient Noise Levels in the RA and RF Zone Districts.
- Disturbance of a Significant Natural Vegetation Type,
- Adverse Affects on a Population or the Critical Habitat of Rare or Endangered Plants or Animals,
- Discharge Into Surface Waters or other Alterations of Surface Water Quality Due to Runoff, and
- © Creation of a Significant Hazard Due to Transport, Use, Disposal, or Accidental Release of Hazardous Materials Within One-Quarter Mile of an Existing or Proposed School.

This report concludes that implementation of mitigation measures will ensure that the level of significance of all above listed potentially significant impacts remains less than significant. In addition, subsequent environmental review for some future plant nursery development projects will identify site-specific mitigation measures necessary to avoid and/or minimize project-specific impacts.

3.5 CUMULATIVE IMPACTS

CEQA requires that an analysis of the cumulative impacts of a project be included in an EIR. Typically the scenario of cumulative development is based on "a summary of projections contained in an adopted general plan or related planning documents which is designed to evaluate regional or area-wide conditions..." [Section 15130(b)(1)(B), CEQA Guidelines]. In this case, the proposed project is a change in the rules and regulations that govern the ongoing development of plant nursery land uses. The analysis of potential impacts associated with the proposed Zoning Text Amendment is in essence an analysis of the cumulative scenario of plant nursery development over the next 15-plus years.

3.6 ALTERNATIVES TO THE PROPOSED PROJECT

Evaluation of alternatives to the proposed project that could reduce significant impacts is a fundamental objective of the environmental review process. The range of alternatives required in an EIR is governed by the "rule of reason." The EIR must evaluate a sufficient range of alternatives to foster an informed discussion of reasonable choices. The alternatives examined in the EIR were developed by the EIR preparers and Placer County Planning Department. Alternatives that were analyzed include:

- The no-project alternative (leaving the Zoning Ordinance as-is), and
- © Changing the proposed Zoning Text Amendment to state that a Use Permit is required for all plant nursery development within Placer County.

3.7 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Chapters 4 through 12 of this EIR evaluate in detail the environmental impacts that would result from implementation of the proposed project. As the Lead Agency, Placer County, in its review of the proposed project and determination for action, will consider the entire environmental evaluation contained in this EIR. Following preparation of the Final EIR, Placer County will have the option to certify that the EIR: (1) has been completed in compliance with CEQA; and (2) was presented to the decision-making body of the lead agency and that the decision-making body reviewed and considered the information contained in the final EIR prior to approving the project (Section 15090, CEQA Guidelines). If the EIR is certified, Placer County Board of Supervisors will determine whether the proposed project will be denied or approved.

Impacts of the proposed project are classified as:

Less than Significant – adverse effects that are not substantial according to CEQA;

Significant/Potentially Significant – potentially substantial adverse changes in the environment for which mitigation measures must be recommended, if feasible;

Significant and Unavoidable – substantial adverse changes in the environment that cannot feasibly be reduced by mitigation measures to a less-than-significant level.

Cumulative impacts, significant unavoidable environmental impacts, and growth-inducing impacts that would occur with implementation of the proposed project are discussed in Chapter 15, CEQA DISCUSSIONS of this EIR.

A listing of the environmental impacts, the level of significance before mitigation, mitigation measures, and level of significance after mitigation is presented in *Table 3.1*.

Table 3.1 Impact Summary

Impact Number	Impact	Significance before Mitigation	Mitigation Measure(s)	
			CHAPTER 4. LAND USE	
4.1	Land Use Incompatibility	PS	Mitigation Measure 4.1.a: All future nursery development within the RA and RF zones, and all future residential development adjacent to plant nurseries in the RA and RF zones shall comply with the applicable agricultural/residential land use buffer zone standards of the <i>Placer County General Plan</i> .	LTS
			Mitigation Measure 4.1b: All future nursery development shall comply with the Placer County Zoning Ordinance, Placer County Grading Ordinance, and the Placer County Land Development Manual with respect to front, side, and rear setbacks, minimum parcel sizes, maximum building height, maximum site coverage, and requirements for landscaping.	
			CHAPTER 5. AESTHETICS	
5.1	Substantial Degradation of Existing Visual Character of a Project Site and/or Adjacent Lands	PS	Mitigation Measure 5.1a: All future nursery development shall comply with the Placer County Zoning Ordinance, Placer County Grading Ordinance, and the Placer County Land Development Manual with respect to front, side, and rear setbacks, minimum parcel sizes, maximum building height, maximum site coverage, and requirements for landscaping. (This measure is also listed as Mitigation Measure 4.1b.)	LTS
5.2	Substantial Increase in Light and Glare	PS	Mitigation Measure 5.2a: All future nursery development within an airport land use compatibility zone shall comply with all relevant requirements of the Placer County Airport Land Use Compatibility Plan with respect to light and glare.	LTS
	and Glaro		Mitigation Measure 5.2b: All future nursery development shall comply with the Placer County Zoning Ordinance, Placer County Grading Ordinance, and the Placer County Land Development Manual with respect to front, side, and rear setbacks, minimum parcel sizes, maximum building height, maximum site coverage, and requirements for landscaping. (This measure is also listed as Mitigation Measure 5.1a.)	

PS = potentially significant.

S = significant.

Impact Number	Impact	Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	CHAPTER 7. AIR QUALITY			
7.1	Exposure of People to Toxic Air Contaminants	PS	Mitigation Measure 7.1a: All diesel powered equipment and trucks used onsite at any plant nursery and all diesel powered trucks used for materials deliveries shall comply with the exhaust emissions standards for such equipment established by the California Air Resources Board as part of the Off-Road Mobile Sources Emission Reduction Program and the Heavy-Duty Diesel In-Use Strategies Program. Mitigation Measure 7.1b: Each plant nursery shall remain in compliance at all times with the licensing, training requirements, and applicable regulations administered by the Placer County Agricultural and Weights and Measures Department and the State of California, and Best Management Practices pertinent to transportation, handling, storage, and application of pesticides, herbicides, and fertilizers. Herbicides, fungicides, and pesticides may only be applied at a nursery site by licensed applicator in accordance with product labeling directions. Storage of chemicals onsite is contingent upon approval by the Placer County Department of Environmental Health and applicable fire district regulations.	LTS
			CHAPTER 8. NOISE	
8.1	Substantial Temporary Increases in Ambient Noise Levels in the RA and RF Zone Districts	PS	Mitigation Measure 8.1a: Site grading and clearing activities for development of plant nurseries in the RA and RF zone districts will require the issuance of Grading Permits. Article 15.48.240 of the Placer County Code specifies the conditions under which grading permits may be issued. The Director of Public Works is directed to impose conditions to protect the health, safety and welfare of the public in the issuance of grading permits. Subsection C.4 of this Article includes "requirements for dust, erosion, sediment and noise control, and hours of operation". Compliance with these provisions will result in less than significant impacts related to substantial temporary noise from site disturbance activities.	LTS

PS = potentially significant.

S = significant.

Impact Number	Impact	Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
	CHAPTER 9. BIOLOGICAL RESOURCES			
9.1	Disturbance of a Significant Natural Vegetation Type	PS	Mitigation Measure 9.1a: Applicants for new nursery development shall comply with the requirements of the Placer County tree preservation ordinance, including requirements for tree replacement and protection during development activities.	LTS
			Mitigation Measure 9.1b: Site grading and clearing activities for development of plant nurseries will require the issuance of Grading Permits. Article 15.48.240 of the Placer County Code specifies the conditions under which grading permits may be issued. Specific to biological resources, the Director of Public Works is directed to impose conditions to safeguard watercourses, including prevention of erosion and avoidance of siltation.	
			Mitigation Measure 9.1c: Prior to approval of grading permits, applicants for new nursery development shall furnish to Placer County evidence that the California Department of Fish and Game, the U.S. Army Corps of Engineers, the National Marine Fisheries Services, and the U.S. Fish and Wildlife Service have been notified by certified letter regarding the existence of wetlands, including vernal pools, and habitat for special status species on the property. If permits are required, they shall be obtained and copies submitted to Placer County prior to any clearing, grading, or excavation work.	
9.2	Adverse Affects on a Population or the Critical Habitat of Rare or Endangered Plants or Animals	PS	Mitigation Measure 9.2a: Prior to approval of grading permits, applicants for new nursery development shall furnish to Placer County evidence that the California Department of Fish and Game, the U.S. Army Corps of Engineers, the National Marine Fisheries Services, and the U.S. Fish and Wildlife Service have been notified by certified letter regarding the existence of wetlands, including vernal pools, and habitat for special status species on the property. If permits are required, they shall be obtained and copies submitted to Placer County prior to any clearing, grading, or excavation work. (This measure is also listed as Mitigation Measure 9.1c.)	LTS

PS = potentially significant.

S = significant.

Impact Number	Impact	Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation	
	CHAPTER 10. HYDROLOGY AND WATER QUALITY				
10.1	Discharge Into Surface Waters or other Alterations of Surface Water Quality Due to Runoff	PS	Mitigation Measure 10.1a: Site grading and clearing activities for development of plant nurseries will require the issuance of Grading Permits. Article 15.48.240 of the Placer County Code specifies the conditions under which grading permits may be issued. Specific to hydrologic resources, the Director of Public Works is directed to impose conditions to safeguard watercourses, including prevention of erosion and avoidance of siltation. (This measure is also listed as Mitigation Measure 9.1b.)	LTS	
			Mitigation Measure 10.1b: Drainage facilities/improvements for future plant nurseries shall be designed in accordance with the requirements of the Placer County Storm Water Management Manual that are in effect at the time of submittal, and to the satisfaction of the Department of Public Works.		
			Mitigation Measure 10.1c: Each plant nursery shall remain in compliance at all times with the licensing, training requirements and applicable regulations administered by the Placer County Agricultural and Weights and Measures Department and the State of California, and Best Management Practices pertinent to transportation, handling, storage, and application of pesticides, herbicides, and fertilizers. Herbicides, fungicides, and pesticides may only be applied at a nursery site by a licensed applicator in accordance with product labeling directions. Storage of chemicals onsite is contingent upon approval by the Placer County Environmental Health Department and applicable fire district regulations. (This portion of this mitigation measure is also listed as Mitigation Measure 7.1b.)		
			The State Water Resources Control Board is the lead agency for coordinating and controlling water quality in California. The State Water Resources Control Board has policies and regulations governing the handling, storage and disposal of hazardous substances. Applicants for nursery development shall obtain any permits and/or other action required by the State Water Resources Control Board or the applicable Regional Water Quality Control Board.		

PS = potentially significant.

S = significant.

Impact Number	Impact	Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
		Снарте	ER 12. HAZARDS AND HAZARDOUS MATERIALS	
12.1	Creation of a Significant Hazard to the Public or the Environment through the Transport, Use, or Disposal of	PS	Mitigation Measure 12.1a: Site grading and clearing activities for development of plant nurseries will require the issuance of Grading Permits. Article 15.48.240 of the Placer County Code specifies the conditions under which grading permits may be issued. Specific to hazards and hazardous materials, the Director of Public Works is directed to impose any condition deemed necessary to protect the health, safety and welfare of the public, to prevent the creation of a hazard to public or private property.	LTS
	Hazardous Materials, or Accidental Release of Hazardous Materials, Including Use and/or Accidental Release Within One-Quarter Mile of a School			
			Mitigation Measure 12.1c: Each plant nursery shall remain in compliance at all times with the licensing, training requirements and applicable regulations administered by the Placer County Agricultural and Weights and Measures Department and the State of California, and Best Management Practices pertinent to transportation, handling, storage, and application of pesticides, herbicides, and fertilizers. Herbicides, fungicides, and pesticides may only be applied at a nursery site by licensed applicator in accordance with product labeling directions. Storage of chemicals on site is contingent upon approval by the Placer County Environmental Health Department and applicable fire district regulations.	

PS = potentially significant.

S = significant.

Impact Number	Impact	Significance before Mitigation	Mitigation Measure(s)	Significance after Mitigation
			The State Water Resources Control Board is the lead agency for coordinating and controlling water quality in California. The State Water Resources Control Board has policies and regulations governing the handling, storage and disposal of hazardous substances. Any permits and/or other action required by the State Water Resources Control Board or applicable Regional Water Quality Control Board will be obtained. (<i>This mitigation measure is also listed as 11.1c.</i>)	
			Mitigation Measure 12.1d: Each plant nursery shall follow the practices recommended by the Placer County Mosquito Abatement District to reduce the danger from mosquitoes that may occur at a nursery site. Nursery operators shall eliminate all standing water in containers and on the ground at the nursery site. Water shall be circulated and filtered in ponds and water troughs and supply cisterns. Surface bodies of water shall be constructed and maintained to reduce potential or actual mosquito breeding habitat. Biota-oriented management such as use of mosquito feeding fish are advocated.	

PS = potentially significant.

S = significant.

CHAPTER 4

LAND USE

CHAPTER 4 LAND USE

4.1 SETTING

Placer County is located in northeastern California, 16 miles northeast of Sacramento, sharing a common border with Nevada County to the north, El Dorado and Sacramento counties to the south, Yuba and Sutter counties to the west, and the State of Nevada to the east. The topography in Placer County varies greatly. The county encompasses an area that reaches from the Sacramento Valley grasslands and agricultural areas in the west county at an elevation of about 200 feet, to elevations in the Sierra Nevada Mountains more than 9,000 feet above sea level and the alpine areas surrounding the Lake Tahoe Basin.

The urbanized cities of Roseville, Rocklin, Lincoln, and the unincorporated community of Sheridan are located in the western county at the base of the oak covered Sierra foothills. The American River and Folsom Lake reservoir, created by a dam on the river, is located at the eastern edge of Placer County. This 18,000-acre lake provides water and recreation to the region. The communities of Auburn, Colfax, and Foresthill are located where the foothills ascend into the mountains near the canyons of the north and middle forks of the American River. The Sierra Nevada Mountains climb beyond the foothills to the east and are home to the alpine Placer County communities of Gold Run, Emigrant Gap, Alpine Meadows, Squaw Valley, and Tahoe City.

Existing Land Uses Project Area

Land uses in Placer County vary as widely as the terrain. In urbanized areas, a variety of jobs and housing types are provided along with a highly developed transportation network accommodating travel by air, rail, and automobile. Commercial and industrial areas located primarily along the main transportation corridors of Highways 80, 65, and 49 provide jobs, services, and products for residents and export. The county also has significant timber, mineral, and water resources and provides recreational opportunities in the Sierras and at the County's many resorts, parks, lakes, rivers, and streams.

Land Development Trends

Placer County has seen significant population growth in the last decade. From 1990 to 2002, the county's population grew from 172,796 persons to 264,900, approximately a 65% increase. An economic expansion driven by the growth of the technology sector created a significant number of jobs in California starting in the early 1990's. The large amount of land available in Placer County for commercial and residential development at lower costs than other regions contributed to business expansion and attracted the location of many new businesses into the county. The expansion, although slowed by the current economic downturn, has been sustained, as business and residential costs remain low relative to other locations (Placer County Economic Profile 2003).

The rapid population growth has had the greatest impacts in the western parts of Placer County. The demand for residential and commercial development in Roseville, Rocklin, Lincoln, and along the Highway 65 corridor has placed development pressures on rural areas, including agricultural lands.

Nursery Land Use

In 2001, there were approximately 41 nurseries in Placer County and an estimated 208 acres of land devoted to plant nurseries for an average of 5.07 acres. Most of the nurseries are located in the west county adjacent to or in populated areas where the demand for these products is high. Nursery products include ornamental and food plants and seeds, garden accessories and tools, herbicides, pesticides, and soil amendments, such as composts and fertilizers. Consumers for nursery products include farmers, landscape contractors, and gardeners.

According to the United States Department of Agriculture, nursery sales in the State of California exceeded \$1.8 million in 2001 and rose to \$2.1 billion in 2002 (USDA 2003). According to the Placer County Agriculture Commissioner's annual Agricultural Crop Reports, the value of nursery products sold in Placer County has risen from under \$1 million in 1970, to almost \$13 million in 2001. The growth in nursery sales has risen concurrently with County's population growth.

Assuming the trend in nursery product sales growth will continue coincident to population growth through 2020, the Placer County Planning Department projects approximately 156 additional acres of plant nursery land use will be developed by 2020 in Placer County. Given the average nursery size of 5.07 acres, 31 new nurseries would be expected to provide the 156 additional acres of land devoted to plant nurseries (Placer County Planning Dept. 2002).

The smallest existing nursery in Placer County is 0.08 acres (±3,480 square feet) in size and the largest is 85.0 acres, located in the Auburn and Newcastle areas respectively. Of the 41 nurseries existing in Placer County, acreage information is available for 33 of them. Eleven are less than one acre; 14 are between one and five acres, and eight are larger than five acres. Based on this categorization, this analysis assumes that 10 of the 31 anticipated new nurseries will be less than one acre (33%), 13 will be between one and five acres (42%), and 8 will be larger than five acres (25%).

Two common types of plant production nurseries are bareroot and container nurseries. Bareroot nurseries grow plant stock in fields like other crops and are harvested and packaged for sale or shipment. Bareroot nurseries tend to use more land than container nurseries, since they must have growing areas and access to sufficient sunlight. Container nurseries utilize a variety of techniques to grow plants, including greenhouses, burlap balls for wrapping roots, pot-in-pot, and growing containers ranging in size from a fraction of a gallon to hundreds of gallons, depending on the type, or species of plant being grown (Landis et al. 1999).

Nursery Development

Important land characteristics have to be considered when siting a nursery. According to the United States Department of Agriculture, the most important criteria for nursery site selection are access to sun, quality water, reliable energy, adequate land, and ecological and political concerns. Other issues include protected microclimates, topography, seasonal labor supply, and the distance to markets (USDA 1995). Competition from imported nursery products could be a limiting factor, if coming from an area where costs of production are lower.

Land characteristics such as slope, acreage, orientation, and proximity to transportation and surrounding land uses will also affect the scale of the operation. The nature of the site will

determine the intensity of development needed, for example, grading, piping or drilling of wells for water, and easements for utilities, waste treatment, and roads.

In a circular from the Florida University Cooperative extension titled *Starting a Wholesale Nursery Business*, D. L. Ingram et al., describe the basic considerations for nursery site development more specifically (University of Florida 2000). Site analysis and development is important in planning a nursery. Site characteristics include soil types, parcel size and shape, and water availability. Land should have less than five degrees slope for optimum airflow and surface water drainage. Steeper slopes often limit the layout of the nursery and decrease production efficiency. Steep slopes are also subject to erosion. The site will also affect the production and marketing costs of a wholesale nursery. Proper organization of facilities for specific operations in the nursery can increase the efficiency of movement of materials, and reduce costs.

An ample supply of high quality water must be available at the nursery site. Specific water issues can include high soluble salts, iron, and/or sulfur. Environmental and micro-climatic conditions of the nursery site must be considered as well. Low areas or depressions are subject to cold, frost and flooding. Soil characteristics on the site could contribute to the success or failure of a field nursery. Soil surface and subsurface drainage, and soil adaptability to roadways, are important in container nurseries.

The location of nurseries in proximity to other nurseries is an important consideration. Ingram et al. recommend the location of several nurseries in a specific area. Buyers are attracted to an area with several nurseries with specialized products. Cooperative buying of raw materials and cooperative shipping of products are other advantages of this close proximity. They suggest that nurseries, like other industries, may be able to reduce costs by clustering.

Each nursery presents its own planning issues. Several functional areas are needed. Space is generally required for propagation, office, soil preparation, potting, growing areas, shop, and shipping. These areas should be arranged to minimize the distance that input materials and finished products must be moved. For example, the potting area might be located between the propagation and growing areas with easy access for raw material deliveries. The design should consider the growing-bed size, amount of water available, prevailing wind direction, types of plants grown, and water needs for cold protection.

Nursery Operations

Daily operations of nurseries vary depending on a number of factors including: type of products, growing season, local conditions and demand. The need for tractors, trailers, trucks, greenhouses, storage and work buildings, hand tools, and heavy equipment vary with the type and size of nursery as well. Other varying factors that affect the intensity of work being done at the site include hours of operation, delivery and shipping activity, and whether the products are grown seasonally or year-round. This analysis assumes that the use of heavy equipment, greenhouses, and accessory structures for plant nurseries are essentially the same as those found in other crop production land uses.

4.2 REGULATORY FRAMEWORK

Regulation of Nurseries

Plant nurseries in Placer County are regulated by the *California Food and Agricultural Code (FAC)*, the *California Code of Regulations (CCR)*, and the *Placer County Code*. The Placer County Agricultural Commissioner is an enforcing officer of all laws, rules, and regulations relative to the prevention of the introduction into or the spread within the state of plant pests and as to such activities is under the supervision of the Secretary of Food and Agriculture. The Agricultural Commissioner inspects nurseries for pests injurious to plants and assists nursery operators with pest control problems. The Commissioner's office inspects incoming shipments of nursery stock, enforces plant quarantines, and inspects nursery stock for proper labeling and condition.

The Commissioner is also responsible for issuing shipping permits, nursery stock certificates, and other required certificates that facilitate movement of nursery stock in trade. The Commissioner is responsible for enforcing quarantine requirements for nursery stock imported into the County and before nurseries are permitted to make shipments to other states or countries (California Department of Food and Agriculture 2003).

The California Integrated Waste Management Board is responsible for working with local enforcement agencies to implement the California Integrated Waste Management Act of 1989, commencing with Section 40000 of the Public Resources Code, which establishes standards for the handling of compost. The Act directs that prior to commencing operations, all compostable materials handling activities shall obtain a *Compostable Materials Handling Facility Permit* pursuant to the requirements of *Title 27*, *California Code of Regulations*, *Division 2*, *Subdivision 1*, *Chapter 4*, *Subchapter 1 and Subchapter 3*, *Articles 1*, 2, 3 and 3.1 (commencing with section 21450)

Exclusions from the composting requirements include the handling of green material, feedstock, additives, amendments, compost, or chipped and ground material if 500 cubic yards or less is on-site at any one time, the compostable materials are generated on site, and if no more than 1,000 cubic yards of materials are either sold or given away annually. Storage of bagged products from compostable material is an excluded activity provided that such bags are no greater than 5 cubic yards (*Public Resources Code, Title 27, Section 17855*).

Land Use Regulation

California Land Use Planning law dictates that all land use decisions must be consistent with the implementing jurisdiction's adopted general plan. Land use, housing, and development policies for the County's unincorporated area are generally governed by the *Placer County General Plan* (Placer County 1994) and the *Placer County Zoning Ordinance* (Placer County 2002). The general plan must contain at least seven internally consistent elements that identify the community's land use, circulation, conservation, open space, noise, safety, and housing goals and policies related to development. The Zoning Ordinance acts to apply the rules set forth in the General Plan to specific development proposals.

Placer County General Plan

California State Government Code sections 65300 et seq. requires that counties and cities adopt plans that generally express the community's development goals and policies. The General

Plan serves to identify the community's land use, circulation, and environmental, economic and social goals as they relate to conservation and development. Placer County adopted the *Placer County General Plan* in 1994 to guide development of the lands in its jurisdiction.

The plan describes goals, policies, and implementation programs to direct future land use in the County's jurisdiction. The process of preparing, adopting, implementing and maintaining a General Plan involves the public and provides citizens a forum to participate in guiding future land use. Since the General Plan is the Constitution for all future development, any decision affecting land use and development must be consistent with the general plan [Citizens of Goleta Valley v. Board of Supervisors, 52 Cal. 3rd 553, 570 (1990)].

The land use goals of the *Placer County General Plan* promote the "wise, efficient and environmentally–sensitive use of land;" permit only low intensity development in areas with sensitive environmental resources, or where there is a possible threat to health, safety, or welfare; and direct the County to distinguish among urban, suburban, and rural areas to identify where development will be accommodated in a manner that promotes the maintenance of separate and distinct communities.

Placer County categorizes plant nurseries as agricultural land uses. The General Plan's goal for agricultural land is to designate adequate agricultural land and promote the development of agricultural uses to support the continued viability of Placer County's agricultural economy. Policies that support this goal direct that the County shall maintain agriculturally-designated areas for agricultural uses and direct urban uses to designated urban growth areas and/or cities; and that new development should not encourage expansion into designated agricultural areas.

The General Plan defines land use standards in commercial, timberland, agricultural, and rural residential areas. The proposed Zoning Text Amendment has the potential to affect land in the following General Plan land use designations.

General Commercial (GC) (5,000 sq. ft. minimum parcel size within range determined by zoning, 21 dwelling units per acre)

This designation identifies a variety of urban commercial areas including shopping districts, service commercial areas, office areas, and neighborhood-serving commercial centers. This designation is applied within urban areas where the commercial development will be near major transportation corridors, and within downtowns, village centers, or other major commercial areas or centers. Typical land uses allowed include: all types of retail stores, restaurants, and shopping centers (limited in extent where necessary to maintain compatibility with adjoining land uses, such as in a neighborhood commercial center), offices, service commercial uses, recreation, education, and public assembly uses, medical services, child care facilities, necessary public utility and safety facilities, and similar and compatible uses. Development including multi-family dwellings as the primary land use or as part of a mixed-use project may also be allowed where appropriate.

The County's commercial land use goal is to designate adequate commercial land for and promote development of commercial land uses to meet the present and future needs of Placer

County residents and visitors and maintain economic vitality. The General Plan commercial land use policies direct the County to require that new commercial development be designed to encourage and facilitate pedestrian circulation within and between commercial sites and nearby residential areas rather than being designed primarily to serve vehicular traffic, and to minimize the visual impact of parking areas on public roadways.

Related Zoning and Community Plan Land Use Designations

The General Plan Land Use Element Table I-3 General Plan Land Use Designations and Consistent Zoning Districts lists the following zoning districts as consistent with implementing the General Plan in the General Commercial district areas: Commercial Planned Development (CPD), Neighborhood Commercial (C-1), General Commercial (C-2), Heavy Commercial (C-3), Highway Service (HS), and Office and Professional.

The following Community Plan Land Use designations are consistent with the General Plan General Commercial designated areas: General Commercial, Heavy Commercial, Heavy Commercial, Neighborhood Office, Professional Office, Business and Professional, Civic Center, Commercial, Commercial Retail, Commercial Services, Community Commercial, General Commercial, Generalized Commercial, Heavy Commercial, Neighborhood Commercial, Professional, Professional Office, and Village Commercial.

Timberland (T) (10, 20, 40, 80-640 acre minimum)

This designation is applied to mountainous areas of the county where the primary land uses relate to the growing and harvesting of timber and other forest products, together with limited, low-intensity public and commercial recreational uses. Typical land uses allowed include: all commercial timber production operations and facilities; agricultural operations where soil and slope conditions permit; mineral and other resource extraction operations; recreation uses such as incidental camping, private, institutional and commercial campgrounds (but not recreational vehicle parks); and necessary public utility and safety facilities.

Related Zoning and Community Plan Land Use Designations

The General Plan Land Use Element Table I-3 lists the following zoning districts as consistent with implementing the General Plan in the Timberland designated areas: *Forestry (FOR), Timberland Production Zone (TPZ), Residential Forest (RF), and Open Space (O).*

The following Community Plan Land Use designations are consistent with the General Plan Timberland district areas: *Timberland and Timber Croplands*.

Rural Residential (RR)

(1 to 10 acres minimum parcel size within range determined by zoning, only one principal dwelling unit per lot)

This designation is applied to areas generally located away from cities and unincorporated community centers, as a buffer zone where dispersed residential development on larger parcels would be compatible with smaller-scale farming and ranching operations, and in hilly, mountainous, and/or forested terrain. Typical uses allowed include: detached single-family dwellings and secondary dwellings; agricultural uses such as crop production and grazing, equestrian facilities, and limited agricultural support businesses such as roadside stands, farm

equipment and supplies sales; resource extraction uses; various facilities and services that support residential neighborhoods, such as churches, schools, libraries, child care and medical facilities, and parks and necessary public utility and safety facilities.

Related Zoning and Community Plan Land Use Designations

The General Plan Land Use Element Table I-3 General Plan Land Use Designations and Consistent Zoning Districts lists the following zoning districts consistent in implementing the General Plan in designated Rural Residential areas: Farm (F), Residential Agriculture (RA), Residential Forest (RF), Open Space (O).

The following Community Plan Land Use designations are consistent with the General Plan Rural Residential designated areas: Forest Residential, Rural Estate, Rural Residential, Estate Density, Rural Density, Rural Estates, Rural Low Density Residential, Rural Low Residential, Seasonal Recreational Residential, and Valley Residential.

Low Density Residential (LDR) (10,000 sq. ft. to 1 acre minimum)

This designation is applied within urban areas to single-family residential neighborhoods, with individual homes on lots ranging in area from 10,000 sq. ft. to one acre. Typical land uses allowed include: detached single-family dwellings, secondary dwellings, and residential accessory uses; churches, schools, parks, golf courses, child care facilities; and necessary public utility and safety facilities.

Related Zoning and Community Plan Land Use Designations

The General Plan Land Use Element Table I-3 lists the following zoning districts as being consistent with implementing the General Plan in designated Low Density Residential district areas: *Residential Agriculture (RA) and Residential Single Family (RS)*.

The following Community Plan Land Use designations are consistent with the General Plan Low Density Residential designated areas: Low Density Residential, Low Density, Low Medium Density Residential, and Urban Low Density.

Agriculture (AG) (10, 20, 40, 80-640 acre minimum, only one principal dwelling unit per lot)

This designation identifies land for the production of food and fiber, including areas of prime agricultural soils, and other productive and potentially productive lands where commercial agricultural uses can exist without creating conflicts with other land uses, or where potential conflicts can be mitigated. Typical land uses allowed include: crop production, orchards and vineyards, grazing, pasture and rangeland, hobby farms, other resource extraction activities, facilities that directly support agricultural operations, such as agricultural products processing, and necessary public utility and safety facilities. Allowable residential development in areas designated Agriculture includes one principal dwelling and one secondary dwelling per lot, caretaker/employee housing, and farmworker housing.

Related Zoning and Community Plan Land Use Designations

The General Plan Land Use Element Table I-3 lists the following zoning districts as consistent with implementing the General Plan in designated Agricultural areas: *Agricultural Excusive* (AE), *Farm (F)*, *Residential Agriculture (RA)*, and *Open Space (O)*.

The following Community Plan Land Use designations are consistent with the General Plan Agriculture designated areas: *Agriculture* and *Agriculture Planning Reserve*.

Community Plans

In addition to the General Plan and Zoning regulations, several community plans have been adopted that provide more detailed area specific guidelines for land use and development in unincorporated areas of Placer County. Community plans that could be most affected by implementation of the Zoning Text Amendment are discussed below.

Auburn /Bowman Community Plan

The Placer County Board of Supervisors adopted the *Auburn/Bowman Community Plan* in 1994. The *Auburn/Bowman Community Plan* guides development in approximately 40 square miles between the City of Auburn and the Newcastle/Shirland Tract area to the south, the Nevada County/Placer County line to the north, Interstate Highway 80 to the east, and the community of Ophir to the west. The plan encompasses the Highway 49 corridor from Auburn to the county line. The growth projected in the *Auburn/Bowman Community Plan* has the population in the area included in the Plan rising from $\pm 20,248$ persons in 1990, to $\pm 37,186$ in 2010.

The goals of the *Auburn/Bowman Community Plan* relevant to the proposed Zoning Text Amendment include maintaining compatibility between neighboring uses, preserving and maintaining the rural character and factors that contribute to this character including a harmonious coexistence between residential and agricultural uses; and maintaining productive agricultural uses within the agricultural area.

Policies in the *Auburn/Bowman Community Plan* relevant to the Zoning Text Amendment direct that intensity of use of individual parcels and buildings should be governed by considerations of health and safety as well as impacts on adjoining properties due to noise, traffic, night lighting, or other disturbing conditions. Other land use policies of the *Auburn/Bowman Community Plan* encourage maintaining large agricultural areas and require development to provide adequate buffer zones between agricultural uses and other uses.

Foresthill General Plan

The Foresthill General Plan was adopted by Placer County in 1981 to govern development of the Foresthill community and surrounding area. The plan area includes approximately 56 square miles in the foothills of the western side of the Sierra Nevada Mountains. Elevations in the plan area range from 800 feet above mean sea level to 3,600 feet. The Foresthill townsite originally developed on the fairly broad plateau between the Middle Fork and the North Fork of the American River, near the center of the plan area. This location, referred to as the Foresthill Divide, continues to support the majority of development in the plan area.

The Community Development Element of the Foresthill General Plan establishes land use goals of preserving the rural character of the plan area, maintaining and increasing forestry activity

on appropriate lands, and providing a pattern of commercial growth that meets the needs of the Foresthill community. Policies of the Foresthill General Plan that support these goals include encouraging higher density development in areas where such density is consistent with the existing character of an area; discouraging public services from expanding into areas with significant value as rural open space; preserving existing agricultural activities by ensuring compatible surrounding land uses; requiring large parcel sizes in productive forestry areas; maximizing open space areas through the use of the Planned Unit Development procedures; and maintaining the primary commercial center in the Foresthill Divide downtown area.

Granite Bay Community Plan

The Placer County Board of Supervisors adopted the *Granite Bay Community Plan* in 1989. The *Granite Bay Community Plan* guides development of a 25 square mile area with boundaries formed by Dick Cook Road to the north, Sierra College Boulevard to the west, Folsom Lake to the east, and the Sacramento County line to the south. This area is adjacent to urban areas that have experienced significant growth since the plan's adoption.

The land use goals of the *Granite Bay Community Plan* relevant to the proposed Zoning Text Amendment include: preserving the rural-residential quality of the area by maintaining large lot sizes (2.5 acres), encouraging compatibility between neighboring land uses; developing commercial uses that serve local community needs and do not detract from the rural residential setting; maintaining productive agricultural uses, such as orchards, Christmas tree farms, grazing lands, and horse ranches; and assuring that all building sites and residences are developed in a manner minimizing disturbance to natural terrain and vegetation and maximizing preservation of natural beauty and open space.

Policies in the *Granite Bay Community Plan* Land Use Element are intended to enhance the rural and natural qualities of the unique Granite Bay community. Land use policies are designed to prevent the overuse of land and control intensity of use in order to avoid excessive traffic, drainage problems, soil erosion, loss of vegetation and other resources, and the destruction of the open, rolling terrain, and natural characteristics of the community.

General development policies call for avoiding the enlargement of existing or development of new commercial areas along Douglas Boulevard in order to prevent the creation of a strip commercial corridor in the area; allowing for development only where adequate public, utility and community services can be provided in a timely manner and minimum disturbance to the natural terrain and the environment can be retained and restored; considering retention of open space in the review of all new development; designing non-residential buildings to be of a size and scale conducive to maintaining the rural residential quality of the area; providing connecting plazas, terraces, porches, arcades, canopies or roofs where groups of buildings are used to provide a pleasant and safe environment for pedestrians; and using landscaped buffer yards wherever necessary to minimize the adverse effects of higher intensity uses upon lower intensity uses.

Specific policies regarding land use intensity promote the low intensity of development that provides a transition between the urban densities in adjoining communities and non-intensive land uses to the north and west. These policies direct that density in the planning area should be guided by the consideration of topography, geology, vegetative cover, preservation of

natural terrain and resources, and access to transportation and service facilities while intensity of use of individual parcels and buildings shall be governed by considerations of health and safety; impact on adjoining properties due to noise, traffic, night lighting, or other disturbing conditions; and protection of natural land characteristics.

Horseshoe Bar/Penryn Community Plan

The Placer County Board of Supervisors adopted the *Horseshoe Bar/Penryn Community Plan* in 1994. The Plan study area is comprised of approximately 25 square miles including the unincorporated areas south of Newcastle and Auburn, north of the Granite Bay community, west of Folsom Lake, and east of the Town of Loomis and the cities of Rocklin and Roseville.

The land use goals of the *Horseshoe Bar/Penryn Community Plan* include preserving the rural character and quality of the plan area through maintenance of natural vegetation, minimization of "urban" elements such as streetlights, and use of large parcel sizes; conserving open space areas; maintaining compatibility between neighboring land uses; providing commercial and professional services and facilities necessary to meet the recurring needs of the area's residents; and minimizing disturbance to natural land forms and vegetation during development of new land uses.

Policies of the *Horseshoe Bar/Penryn Community Plan* that support these policies include requirements to retain the natural landscape as much as possible during land development; landscape each project site following construction; limit intensity of land use development based on each individual site's topography, presence of sensitive resources, and proximity to adjacent land uses; minimize negative impacts of development on the existing agricultural operations; allow for continued increased commercial and residential development only where all public services can be provided in an adequate and timely manner; and discourage unnecessarily long vehicle trips by allowing for limited neighborhood commercial development near and around residential areas.

Meadow Vista Community Plan

The Placer County Board of Supervisors adopted the *Meadow Vista Community Plan* in 1996. The Plan study area is comprised of approximately $\pm 7,000$ acres located in the Placer County foothills and seven miles northeast of the City of Auburn. The plan boundaries include the Bear River to the northeast, the Naturewood subdivision to the north, the Meadow Gate Road area to the east, and the Interstate 80 Meadow Vista-Clipper Gap interchange and the old Marty Ranch to the south.

The goals of the *Meadow Vista Community Plan* that pertain to the Zoning Text Amendment direct the County to maintain the rural character, provide for residential development compatible with existing land use, and minimize existing and future conflicts between agricultural and non-agricultural uses in agriculturally designated areas. The land use policies that pertain to the Zoning Text Amendment call for protection of existing land uses, retention of natural buffers between potentially incompatible uses, and consideration of rural quality and the relationship of a project to surrounding land uses in subdivision design.

Protecting Agriculture

The *Meadow Vista Community Plan* has several policies that seek to protect agricultural activity from non-agricultural development. The policies promote the *Placer County Right to Farm Ordinance* and educational programs to inform citizens of the importance of protecting farmland, discourage lots smaller than 4.6 acres in size from abutting agricultural parcels, and require development adjacent to agricultural parcels to use buffers, setbacks and other measures that seek to minimize conflicts with development and agriculture.

Dry Creek West Placer Community Plan

The *Dry Creek West Placer Community Plan* area is located in the southwestern corner of Placer County, between the Placer County-Sacramento County line and Baseline Road. It encompasses an area of approximately 9,200 acres, which supported approximately 1,900 residents at the time plan adoption (1990). The plan area is surrounded by agricultural land uses to the north and west, public facility/industrial land uses in the City of Roseville to the east, and rural residential development to the south.

General goals of the *Dry Creek West Placer Community Plan* applicable to the proposed Zoning Text Amendment include minimizing impacts of development on the natural resources of the plan area; providing open space on both local and regional scales (in contrast to an urban landscape); locating urban and suburban development in areas where urban services and transportation facilities are readily available or can be made available in a timely fashion; and encouraging continued and increased agricultural activities. Goals contained in the Community Development Element of this community plan relevant to the proposed project include protecting existing rural-residential areas in the plan are from urban encroachment; preserving outstanding visual features, natural resources, and landmarks; providing adequate and convenient shopping areas; locating noise-sensitive land uses in appropriate areas; protecting lives and property in the plan area from flood hazards; and encouraging compatibility between adjacent land uses.

These goals are supported by policies that require and/or encourage maintenance of large agricultural areas and provision by new development of buffer zones to protect agricultural areas from encroachment; retention of open space features; preparation of fiscal impact analysis for new development especially with regard to provision of public services; use of greenbelts and landscaping along roadways; provision of neighborhood commercial areas in proximity to residential development to reduce vehicle miles traveled in the plan area; maintenance of strong design control for commercial and industrial development; location of new development in non-sensitive areas and restriction of development in environmentally sensitive areas; and allowing increased commercial and residential development only where all public services are available or can be made available in a timely manner.

Placer County Zoning Ordinance: Chapter 17 Placer County Code

The *Placer County Zoning Ordinance* regulates land use and development density in the unincorporated areas of Placer County and is required to be consistent with the goals and policies of the General Plan. The Zoning Ordinance's main function is to implement the General Plan by applying detailed standards to individual project proposals. Proposed land uses are required to be consistent with the current zoning designations. Section 17.06.050 of the

Zoning Ordinance describes the types of permits currently required for nurseries in zoning districts where that type of land use is allowed.

Currently Permitted Nursery Land Use

The current Zoning text defines nurseries the following way; "Plant nurseries" (land use) Commercial agricultural establishments engaged in the production of ornamental plants and other nursery products (e.g., wholesale and retail nurseries) and commercial scale greenhouses (home greenhouses are included under "Residential Accessory Uses"). The sale of houseplants or other nursery products entirely within a building is also included under "Retail Stores, General Merchandise".

The section below details how the Zoning Ordinance defines increasing levels of discretion applied by the types of review or permits it directs the County to use when considering allowable land uses, and how each is currently applied to plant nursery uses in the various zoning districts.

Zoning Compliance (A)

Uses requiring Zoning Compliance are allowed without land use permit approval subject to compliance with all applicable provisions of this chapter ("A" uses on the zoning land use tables). No land use permit is required for "A" uses because they typically involve no or minimal construction activities, are accessory to some other land use that will be the primary use of a site (which might require a land use permit), or are otherwise entirely consistent with the purposes of the particular zone.

Currently no zoning districts allow a plant nursery with Zoning Compliance.

Zoning Clearance (C)

Zoning Clearance is a routine land use approval that involves Planning Department staff checking a proposed development to ensure that all applicable zoning requirements will be satisfied (e.g., setbacks, height limits, parking requirements). Zoning clearance is required for land uses that are consistent with the basic purposes of the particular zone and are unlikely to create any problems that will not be adequately handled by the *General Development Standards* at Article 17.54.

Zoning Clearance is currently required for nursery use in the General Commercial (C2), Heavy Commercial (C3), Highway Services (HS), and Industrial (IN) districts.

Minor Use Permit (MUP)

Minor use permit approval is required for certain land uses that are generally consistent with the purposes of the zone, but could create problems for adjoining properties, the surrounding area, and their populations if such uses are not designed to be compatible with surrounding land uses. The purpose of a minor use permit is to allow Planning Department staff and the Zoning Administrator to evaluate a proposed use to determine if problems may occur, to provide the public with an opportunity to review the proposed project and express their concerns in a public hearing, to work with the project applicant to adjust the project through conditions of approval to solve any potential problems that are identified, or to disapprove a project if identified problems cannot be acceptably corrected.

A *Minor Use Permit* is currently required for plant nurseries in the Neighborhood Commercial (C1,) Industrial Park (INP), Agricultural Exclusive (AE), Farm (F), and Forestry (FOR) districts.

Conditional Use Permit (CUP)

Conditional use permit approval is required for certain land uses that may be appropriate in a zone, depending on the design of the individual project and the characteristics of the proposed site and surroundings. Such uses can either raise major land use policy issues or could create serious problems for adjoining properties, the surrounding area, and their populations if such uses are not appropriately located and designed. The purpose of the use permit is to allow the Planning Department and the Placer County Planning Commission to evaluate a proposed use to determine if problems may occur, to provide the public with an opportunity to review the proposed project and express their concerns in a public hearing, to work with the project applicant to adjust the project through conditions of approval to solve any potential problems that are identified, or to disapprove a project if identified problems cannot be acceptably corrected.

A *Conditional Use Permit* is currently required for plant nurseries in the Commercial Planned Development (CPD) zoning district.

Current Zoning Districts

The following zoning districts currently allow land uses similar to Plant Production Nurseries and are located adjacent to urbanized areas, where with proximity to high demand for products, plant nurseries may be more likely to develop.

Residential Agriculture Zoning District

The Residential Agriculture (RA) zoning district covers 44,000 acres of land in Placer County. Much of this land is located to the north and east of the incorporated cities of Roseville, Rocklin, and Loomis and in the foothills west of Folsom Lake. This area also includes much of the unincorporated area around Auburn, west to the community of Ophir and northeast surrounding the communities of Bowman, Meadow Vista, Clipper Gap, Colfax, and Applegate. Other small areas designated with RA zoning are found near Foresthill, Michigan Bluff, Gold Run, Baxter, and Emigrant Gap.

According to article 17.44.010.A of the Zoning Ordinance, the main purpose of the Residential Agriculture zone district is to stabilize and protect the rural residential characteristics of the area to which it is applied and to promote and encourage a suitable environment for family life, including agricultural uses.

Table 4.1 shows agricultural uses currently allowed in the Residential Agricultural zoning district, permit requirements, and minimum lot areas. Most zone districts also establish "setback" requirements. The Zoning Ordinance defines setback as "an area on a lot where no buildings, structures, or additions to them may be located, and which thereby becomes a yard area." Setback requirements in the RA zone from a front lot line are 50 feet, while side and rear setbacks must be a minimum of 30 feet.

Table 4.1
Residential Agriculture (RA) Zoning District

Allowable Agricultural, Resource and Open Space Land Uses	Land Use Permit	Minimum Lot Area (sq. ft.) ⁽¹⁾	Specific Standards in Zoning Section ⁽²⁾
Agricultural accessory structure	С	40,000	17.56.020(B)
Agricultural processing	MUP		
Animal raising and keeping	See Section	17.56.050	
Crop production	А	40,000	
Equestrian facilities	See Section	17.56.050	
Fisheries and game preserves	Α	40,000	
Forestry	А	40,000	
Grazing	А	10 Acres	17.04.030
Mining, surface, and subsurface	CUP	40,000	17.56.270
Water extraction and storage (commercial)	CUP	40,000	
Retail Trade	•		
Roadside stands for agricultural products	С	40,000	17.56.160

¹ Minimum lot areas apply only to newly created parcels. Uses which are listed as permitted may be allowed on existing legal, non-conforming parcels which do not conform to the minimum lot size requirement if all other appropriate development standards are met.

Source: Placer County Zoning Ordinance 2002

Residential Forest Zoning District

The Residential Forest (RF) zoning district covers 60,691 acres of land in Placer County and is found mostly in the eastern parts of the county. Large sections of RF zoned land are located along Interstate 80 north of Bowman and encompass large tracts of land around the communities of Colfax, Gold Run, Baxter, and Emigrant Gap. There also are large areas of RF zoned land around Foresthill and Michigan Bluff, east to the Tahoe basin.

Table 4.2 shows the permit requirements for agricultural uses currently allowed in the Residential Forestry. The minimum lot area for all land uses within the RF zone is ten acres, "unless a '-B' combining district applies to the site, or a greater area is required by the Environmental Health Division, or the provisions of Article 17.56" (Placer County 2002). The "-B" combining district expresses a minimum lot size requirement that overrides the minimum requirement of the underlying zone. This designation is assigned to an area "based upon special characteristics of the site [such as] sensitive environmental characteristics, limited resource capacities, and community character" (Placer County 2002). The minimum lot width is 200 feet. As in the RA zone, these standards apply only to newly created parcels. Uses permitted within the RF zone may be allowed on existing legal parcels that do not conform to the minimum lot size requirement if all other appropriate development standards are met. In the RF zone, setback requirements are the same as in the RA zone: 50 feet in front, 30 feet in sides and rear.

² Specific standards are found in Division VII- Specific Use Regulations of the Zoning Ordinance. These standards apply more specific development standards tailored to the type of use.

Table 4.2
Residential Forestry (RF) Zoning District

Allowable Agricultural, Resource and Open Space Land Uses	Land Use Permit	Specific Standards in Zoning Section (1)
Agricultural accessory structure	С	17.56.020(B)
Agricultural processing	MUP	
Animal raising and keeping	See Section 1	7.56.050
Crop production	Α	
Equestrian facilities	See Section 1	7.56.050
Fisheries and game preserves	Α	
Forestry	Α	
Grazing	Α	17.04.030
Mining, surface, and subsurface	CUP	17.56.270
Water extraction and storage (commercial)	CUP	
Retail Trade		
Roadside stands for agricultural products	С	17.56.160

¹ Specific standards are found in Division VII - Specific Use Regulations of the Zoning Ordinance. These standards apply more specific development standards tailored to the type of use. Source: Placer County Zoning Ordinance

According to article 17.46.010.A of the Zoning Ordinance, the main purpose of the Residential Forest (RF) zone district is to provide opportunities for rural residential living in the forested, mountainous, or foothill areas of Placer County.

Farm Zoning District

The Farm (F) zoning district is applied to ±182,000 acres of land and covers a majority of the unincorporated land adjacent to the cities and urban areas in the western portion of the county, with some Farm zoned land in the central portion. Large areas of Farm zoned land surround the communities of Colfax, Loomis, Roseville, Rocklin, and Lincoln.

Table 4.3 shows permit requirements for agricultural uses currently allowed in the Farm zoning district. The minimum lot area for all land uses within the Farm zone is 200,000 square feet (4.6 acres), "unless a '-B' combining district applies to the site, or a greater area is required by the Health Department or the provisions of Article 17.56" (Placer County 2002). The minimum lot width in this zone is 200 feet. As in the RA and RF zones, these standards apply to newly created parcels. Development is allowed to occur on existing parcels that do not conform to these standards if all other standards can be met. Setback requirements from a front lot line are 50 feet, while minimum side and rear setbacks are 30 feet.

Table 4.3 Farm (F) Zoning District

Allowable Agricultural, Resource and Open Space Land Uses	Land Use Permit	Specific Standards in Zoning Section (1)
Agricultural accessory structures	С	17.56.020(B)
Agricultural processing	MUP	
Animal raising and keeping	See Section 1	7.56.050

Allowable Agricultural, Resource and Open Space Land Uses	Land Use Permit	Specific Standards in Zoning Section (1)
Crop production	Α	
Equestrian facilities	See Section 1	7.56.050
Fertilizer Plants	CUP	
Fisheries and game preserves	Α	
Forestry	Α	
Grazing	Α	17.04.030
Mining, surface, and subsurface	CUP	17.56.270
Plant nurseries	MUP	
Water extraction and storage (commercial)	CUP	
Retail Trade		
Outdoor retail sales	See Section 1	7.56.160
Roadside stands for agricultural products	С	17.56.160

¹ Specific standards are found in Division VII- Specific Use Regulations of the Zoning Ordinance. These standards apply more specific development standards tailored to the type of use.

Source: Placer County Zoning Ordinance

According to article 17.10.010.A of the Zoning Ordinance, the main purpose of the Farm (F) zoning district is to provide areas for the conduct of commercial agricultural operations that can also accommodate necessary services to support agricultural uses, together with residential land uses at low population densities.

Right to Farm Ordinance

The Placer County Board of Supervisors adopted the Right to Farm Ordinance, Article XII Section 700 of the County Code, in 1989 and revised it in 1999. According to the Placer County Agricultural Commissioner's office, as population has grown since 1954, agricultural acreage in Placer County has been reduced by over 30%. As the population increased, so too has the incidence of conflicts and nuisance suits as residential uses locate in rural areas that have historically been in agricultural use. It is the intent of the Right to Farm Ordinance to curtail these conflicts and nuisance suits by establishing protections for agricultural activities.

The impacts of agricultural activities include noise from machines, vehicles and animals; air pollutant emissions from dust, burning, and use of equipment and chemicals; generation of odors; and operations at all hours of the day and night, which creates additional noise and light impacts. These practices are a normal part of conducting agricultural business, but can have significant effects on nearby residential uses.

According to the language of the Right to Farm Ordinance, it is the declared policy of Placer County to preserve, protect, and encourage the development and improvement of its agricultural land for the production of food and other agricultural products.

At section 5.705 the Ordinance states, "No agricultural activity, operation, or facility, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations shall be or become a nuisance, private or public, due to any changed condition in or about the

locality, after the same has been in operation for more than one year if it was not a nuisance at the time it began."

At Section 5.710, "For purpose of this section, the term 'agricultural activity, operation, or facility, or appurtenances thereof' shall include, but not be limited to, the cultivation and tillage of soil, dairying, the production, cultivation, growing, and harvesting of any agricultural commodity including timber, Christmas trees, viticulture, apiculture, nursery stock, or horticulture, the raising of livestock, fur bearing animals, fish, or poultry, and game birds, and any practices performed by a farmer or on a farm as incident to or in conjunction with such farming operations, including preparation for market, delivery to storage, or to market, or to carriers for transportation to market" (emphasis added).

A copy of the Right to Farm Ordinance is given to buyers of Placer County property upon purchase of their property. The seller or their authorized agent will keep on file a disclosure statement about the Right to Farm Ordinance signed by the buyer with the escrow process.

The Right to Farm Ordinance covers the production, cultivation, growing and harvesting of nursery stock. The proposed Zoning Text Amendment includes specifying that plant nurseries are a type of crop production in accordance with the Right to Farm Ordinance.

Agricultural Lands

The Williamson Act

The California Land Conservation Act (CLCA) of 1965, Sections 51200 et seq. of the California Government Code, commonly referred to as the "Williamson Act," enables local governments to restrict the use of specific parcels of land to agricultural or related open space use. Landowners enter into contracts with participating cities and counties and agree to restrict their land to agriculture or open space use for a minimum of 10 years. In return, landowners receive property tax assessments that are much lower than normal because they are based upon farming and open space uses as opposed to full market (speculative) value. Local governments receive an annual subvention of forgone property tax revenues from the State via the Open Space Subvention Act of 1971. Plant Production Nurseries in agricultural districts may qualify for this tax program.

4.3 IMPACTS

Significance Criteria

According to the CEQA Guidelines, a project can result in adverse environmental impacts relating to land use if it has the potential to substantially alter the existing or planned land use of an area. A land use impact would be significant if implementation of the proposed project:

- Disrupts or divides the physical arrangement of an established community;
- Converts prime agricultural land to nonagricultural use or impairs the agricultural productivity of prime agricultural land;
- Conflicts with established recreational, educational, religious, or scientific uses of the area;

- Conflicts with adopted land use or environmental plans and goals of the community where it is located; or
- © Creates a land use incompatibility.

Impacts Determined to be Less than Significant

Disrupt or Divide the Physical Arrangement of an Established Community. The Zoning Text Amendment does not propose any new construction that could cause a disruption of the physical arrangement of any Placer County community. The Amendment does not propose to change the current land use boundaries, densities, or intensity of use and therefore adoption of the proposed Zoning Text Amendment would have a less than significant potential to physically disrupt or divide an established community. Potential impacts related to land use incompatibility are discussed in Impact 4.1.

Convert Prime Agricultural Land to Nonagricultural Use or Impair the Agricultural Productivity of Prime Agricultural Land. The Zoning Text Amendment would not impair prime agricultural land, nor will it convert land currently designated for agricultural use to other uses. Most of the prime agricultural land in Placer County is found in the western portions of the county, where the majority of land is designated Farm. Production of plant nursery stock is considered to be an agricultural land use. Therefore development of Plant Production Nurseries and Plant Production, Plus Nurseries would contribute to the production of agricultural products within the county. Plant Nurseries, Retail would not be permitted in the Farm zone. The proposed Zoning Text Amendment would have no impact on existing agricultural land and agricultural productivity.

Conflict with Established Recreational, Educational, Religious, or Scientific Uses. There are not any public facility, education, or religious activities that would be regulated, restricted or altered by the language in the proposed Zoning Text Amendment. No land designation currently allowing recreation, education, religious, or scientific uses would be changed in location or intensity by the Amendment, therefore this impact is less than significant.

Conflict with Goals, Policies, or Land Use Designations of the Applicable General Plan, Community Plan, or Zoning. The adoption of the Zoning Text Amendment would not create any conflicts with existing regulations. The proposed amendments do not include changes to any current land use boundaries, densities, or intensity of use. The proposed project would alter the zoning regulations related to the development and operation of plant nurseries.

The proposed amendments would designate Plant Production Nurseries as allowed uses within two residential zones – RA and RF. Plant Production Nurseries are proposed to be defined as agricultural operations that grow and sell nursery stock, but do not sell accessory nursery products. The *Placer County Zoning Ordinance* specifies that the main purpose of the Residential Agriculture (RA) zoning district is to "stabilize and protect" rural residential characteristics, which are include agricultural uses. Crop production, some forms of animal raising and keeping (such as cattle, fowl and poultry, goats and sheep), forestry, and grazing are uses that are currently allowed in the RA zone. The main purpose of the Residential Forestry (RF) zone district is to provide opportunities for rural residential living in the forested, mountainous, and foothill areas of Placer County. Agricultural land uses currently allowed in the RF zone include

animal husbandry, raising of small animals, worm farms, fisheries and game preserves, forestry, and grazing.

Given the similar land use characteristics between these agricultural activities and plant production operations, the proposed amendment to designate Plant Production Nurseries as an allowed use in the RA and RF zones would not conflict with the *Placer County General Plan* and affected community plans goals and policies for residential-agricultural and rural residential land uses.

In addition to the RA and RF zones, under the proposed Zoning Text Amendment, Plant Production Nurseries could develop as an allowed use in the C1, C2, C3, CPD, HS, OP, RES, AP, BP, IN, INP, AE, F, FOR, O, and TPZ zones. These zones also currently permit crop production, forestry, and grazing activities to develop as allowed uses. No conflicts with *Placer County General Plan* and affected community plans goals and policies relevant to commercial, industrial, and agricultural land uses would result from adoption of the proposed Zoning Text Amendment related to Plant Production Nurseries.

The proposed amendments would define Plant Production, Plus Nurseries as commercial establishments that produce and sell nursery stock and sell accessory nursery products (such as soil, soil amendments, pots, and tools). These nurseries would be designated as allowed uses in the C2, C3, HS, and IN zones, which provide for commercial and industrial land uses. Plant Production, Plus Nurseries would require issuance of a use permit in the RA, RF, C1, CPD, OP, RES, INP, AE, F, and FOR zones. All of these zones currently allow crop production, forestry, and grazing activities. The use permit requirement in most zone districts where this nursery type could develop would ensure that potential conflicts that might occur at a project-specific level would be addressed in subsequent environmental review. Adoption of the proposed amendments related to Plant Production, Plus Nursery development in residential, commercial, industrial, and agricultural zones would not create any conflict with applicable General Plan and Community Plan goals and policies.

Finally, the proposed Zoning Text Amendment would modify the existing definition of plant nurseries to apply specifically to Plant Nurseries, Retail and would not alter the permit requirements for development of this type of nursery. Plant Nurseries, Retail would continue to be allowed uses in the C2, C3, HS, and IN zones and would require issuance of a use permit in the C1, CPD, OP, RES, INP, AE, F, and FOR zones. The proposed modification in definition identifies that plant production activities are an accessory use to the sales (wholesale or retail). The adoption of the proposed amendments related to Plant Nurseries, Retail would not create any conflict with applicable goals and policies of the *Placer County General Plan* and affected community plans.

Potentially Significant Impacts

Impact 4.1 Land Use Incompatibility

Significance Before Mitigation	Potentially Significant	
Mitigation Measure	4.1.a	
Significance After Mitigation	Less than Significant	

The adoption of the proposed Zoning Text Amendment would alter the regulations governing the future development of plant nurseries across the county. As discussed in Section 4.1, it is anticipated that approximately 156 acres of land will develop as plant nurseries in Placer County by 2020. Plant Production Nurseries are proposed to be allowed to develop without the issuance of a use permit in several commercial, industrial, and agricultural zone districts. Less than significant impacts are expected to result from this future development because similar land uses (e.g., crop production, agricultural processing, accessory agricultural structures, and roadside stands for agricultural crop sales) are currently allowed and agricultural uses are not typically incompatible with land uses in these zones. Development of Plant Production Nurseries within residential zones is discussed below.

As Plant Nurseries, Retail and Plant Production, Plus Nurseries are commercial land uses, no significant land use incompatibilities are expected to result from the development of these types of nurseries in commercial and industrial zoning districts. No use permit would be required for Plant Nurseries, Retail and Plant Production, Plus Nurseries in the C2, C3, HS, and IN zones. Use permits would be required for development of these types of nurseries in all other zones where they would be allowed. The use permit process would include project specific environmental review and allow for the implementation of mitigation measures as needed to ensure land use compatibility. Therefore, less than significant impacts related to nursery development outside of residential zones are expected.

Under the proposed amendments, Plant Production Nurseries would be allowed uses in the RA and RF zones, unless the growing area exceeds five acres, in which case a Minor Use Permit would be required. All sizes of Plant Production, Plus Nurseries would require a use permit in the RA and RF zones. Environmental effects of nursery operations, such as changes in ambient noise levels and air quality from heavy equipment and delivery trucks, traffic associated with sales activities, application of pesticides, fertilizer use and composting activities, and lighting could conflict with adjacent rural residential uses. The use permit requirement for some plant nurseries in RA and RF zones would allow for subsequent environmental review and implementation of site-specific mitigation measures as necessary, ensuring that potential incompatibilities with adjacent existing land uses could be avoided or mitigated. For plant nurseries not subject to the requirements of a use permit, most impacts would remain less than significant given the similarity between Plant Production Nurseries and other currently allowed agricultural uses (crop production, agricultural processing, accessory agricultural structures, and roadside stands for agricultural crop sales) in these zones. In addition, the Minor Use Permit for Plant Production Nurseries with growing areas that exceed five acres would provide a greater level of protection for existing residential land uses than is currently provided. Currently allowed agricultural uses have no requirements for a use permit at any size.

The General Plan directs the development review and approval process to generally seek to locate land uses adjacent to one another that are compatible, related, mutually supportive, and

similar in the amount of traffic they generate and types of transportation facilities they need. The Plan recognizes that various factors can influence development and prevent a "gradation" of uses compatible with each other, such as environmental constraints, different owners, circulation patterns, and timing of development. The *Placer County General Plan* establishes buffer zone standards to minimize land use conflicts that could result from incompatible uses adjacent to each other.

Incompatibilities between agricultural and residential land uses can arise as new agricultural land uses develop adjacent to existing residential land uses, and as new residential land uses develop adjacent to existing agriculture. To minimize incompatibilities, the General Plan requires a buffer zone between non-agricultural and agricultural development in the form of a setback of sufficient distance to avoid land use conflicts. The General Plan identifies specific buffer zones areas between various agricultural and residential uses in Table I-4 (Page 22) of the Land Use Element. In addition to the mitigation of potential land use conflicts offered by the buffer zone standards, the *Placer County Zoning Ordinance* establishes standards related to minimum front, side, and rear yard setbacks, minimum parcel sizes, maximum building heights, and maximum lot coverage. Implementation of these standards will also serve to mitigate any potential land use conflicts.

4.4 MITIGATION MEASURES

Land Use Incompatibility

Mitigation Measure 4.1.a: All future nursery development within the RA and RF zones, and all future residential development adjacent to plant nurseries in the RA and RF zones shall comply with the applicable agricultural/residential land use buffer zone standards of the Placer County General Plan.

Mitigation Measure 4.1b: All future nursery development shall comply with the Placer County Zoning Ordinance, Placer County Grading Ordinance, and the Placer County Land Development Manual with respect to front, side, and rear setbacks, minimum parcel sizes, maximum building height, maximum site coverage, and requirements for landscaping.

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CHAPTER 5

AESTHETICS

CHAPTER 5 AESTHETICS

5.1 SETTING

The boundaries of Placer County include a variety of visual settings. Elevations throughout the county range between 20 feet above mean sea level to 9,000 feet. Various levels of land development exist, with most urban development in the west, south, and central portions, and rural development in the east and north. Open space and agricultural land uses exist throughout, while the majority of these uses are located in the far western and eastern reaches of the county. A regional map of Placer County is shown in *Figure 2-1*, in **CHAPTER 2 PROJECT DESCRIPTION**. For evaluation purposes, the county has been divided into three areas, as described below.

With respect to aesthetics, plant nurseries are typically a positive visual element in a setting. Vegetation acts to soften the visual impacts of landform alteration, the presence of buildings and vehicles, and the lighting used at a project site. Use of vegetation as a shield for potentially negative visual elements is especially desirable in rural areas.

Regions of Placer County Western Placer County

The western portion of Placer County, which is also the southernmost portion, includes the cities of Rocklin, Lincoln, and Roseville, as well as the unincorporated communities/areas of Sheridan, Dry Creek, Sunset (a largely industrial area), Granite Bay, Horseshoe Bar/Penryn, and Newcastle/Ophir. The majority of western Placer County is a part of the Sacramento Valley, and is characterized by flat to gently rolling topography traversed by a number of waterways which primarily flow east to west and northeast to southwest. The North Fork of the American River and Folsom Lake comprise the eastern boundary of this portion of the county, while the Bear River marks the northern boundary in this area. Oak woodland and grassland habitats are common throughout western Placer County.

Farmland, industrial areas, and undeveloped lands comprise the majority of land in the westernmost reaches of the county. Sheridan is a historic community located near the northern boundary of the county. It supports medium density residential and commercial land uses in the town center, with rural residential land uses in the outlying areas. Within the Granite Bay community, located between the City of Roseville and Folsom Lake, the majority of land uses are rural residential. Commercial land uses are primarily located along Douglas Boulevard and Auburn Folsom Road.

Northeast of the City of Roseville and Town of Loomis, elevations begin to rise more steeply. The communities of Penryn, Newcastle, and Ophir are characterized by the transition in topography and vegetation from the western to central regions of the county. This includes steeper slopes, increases in density of vegetation, and more pronounced variations in topography. The Horseshoe Bar/Penryn and Newcastle/Ophir areas primarily support rural residential land uses, with commercial areas near I-80 and along Ophir Road.

Central Placer County

Central Placer County is generally defined as the area from the City of Auburn northeast to the community of Dutch Flat and east from Auburn to the community of Foresthill. It also includes the communities of Meadow Vista, Weimar, Applegate, Clipper Gap, Colfax, Gold Run, and Alta. A wide range of topographic features, including flat areas, gentle hills, and steep slopes, characterize this area. The North Fork of the American River traverses central Placer County while the Middle Fork delineates the boundary between Placer County and El Dorado County. The two forks converge approximately two miles northeast of downtown Auburn. Steep canyons and ravines occur along both forks, providing sweeping vistas of largely undeveloped lands. Vegetation communities present in central Placer County include oak woodlands, coniferous forests, grasslands, riparian areas, ponds and lakes, and chaparral. Wooded areas in this portion of the county tend to have more dense tree canopies than similar habitat types located in western Placer County.

Eastern Placer County

Eastern Placer County stretches to the western and northern shore of Lake Tahoe. Topography in this portion of the county primarily consists of steep hills, mountains, and ravines. Several reservoirs exist within this portion of the county, including Sugar Pine, Lake Valley, French Meadows, and Hell Hole. The Rubicon River forms the boundary between Placer and El Dorado counties west of Hell Hole reservoir. Oak woodlands are less common while coniferous forests comprise the majority of natural vegetation communities. Portions of El Dorado and Tahoe National Forests are located in this portion of the county.

Developed areas are found primarily along Interstate 80 and the shores of Lake Tahoe. These communities include Baxter, Blue Canyon, Emigrant Gap, Cisco Grove, Northstar, Tahoe Vista, King's Beach, Tahoe City, Squaw Valley, and Alpine Meadows. While most of these communities have a historic area and some commercial centers where land use densities are moderate to high, the majority of the development areas within these communities support rural residential land uses. Scenic vistas and resources are largely preserved within these areas.

Aesthetic Factors

Topography

In areas of steep slopes, the topography can act as a visual screen, limiting views of land use development from nearby areas. However, ravines and canyons allow for viewing of developed areas across these valleys, from one hillside to another. Alterations in topography in areas with hills and steep slopes can result in significant changes in the visual character of a location.

In areas primarily consisting of flat land and gentle hills, developed areas can frequently be seen from a distance, as the line of sight is uninterrupted. Grading in flat areas does not typically result in significant impacts on aesthetics, however alteration of even gentle hills in otherwise flat areas can result in impacts to the visual character of an area.

Vegetation

Natural and introduced vegetation can be a significant component of a visual setting. Dense vegetation along riparian areas can provide effective visual screening, while trees and shrubs

can help soften the appearances of structures. Especially large and/or distinctively shaped trees can serve as community landmarks. Alteration or removal of such trees can be considered a significant change in a local setting and is likely to result in strong psychological responses from community members.

Light and Glare

The most prominent nighttime light sources in Placer County are associated with urban areas, including streetlights and security lighting for commercial and residential land uses. Sources of glare are also associated with urban areas, and primarily include the use of reflective building materials. Water bodies also serve as a source of glare.

Sources of light and glare are limited within rural areas. Existing light sources are associated with individual residences, public land uses (such as churches), and service type land uses (such as medical facilities and public safety and utility facilities). Typically, the large parcel sizes in these areas limit the impact of a light source on adjacent land uses. Most non-residential land uses within the RA and RF zones require the issuance of a use permit. The use permit approval process provides the County with the opportunity to require conditions of approval to ensure a minimum of light spillage onto residential properties.

Intensity of Development

The intensity and density of land use development plays a major role in the visual character of an area. Rural residential areas tend to consist of large lots that support a few buildings, such as a house and some accessory structures. These areas are characterized by minimal land development, preservation of vegetation, and large parcel sizes. In contrast are urban areas, which are typically developed in smaller lots with less open space between buildings and facilities.

5.2 REGULATORY FRAMEWORK

Placer County General Plan

The *Placer County General Plan* identifies protection of visual and scenic resources as important in providing a high quality-of-life for county residents and in promoting recreation and tourism. The General Plan also provides several policies governing land development to ensure that the goal of protecting visual and scenic resources is met. Policies include preservation of existing visual character of a setting through minimization of grading, land form alteration, and vegetation removal; use of design elements that provide screening and that blend with the natural landscape; and compliance with the *Placer County Design Guidelines Manual*. Specific requirements of the Design Guidelines are discussed below. The General Plan also requires that County discourage the use of outdoor lighting that shines unnecessarily onto adjacent properties or into the night sky.

Auburn/Bowman Community Plan

The *Auburn/Bowman Community Plan* governs an area that stretches from the north Placer County boundary along State Route 49 to south of the City of Auburn and encompasses the area around State Route 49 and Interstate 80 north of the City of Auburn. The elevations in this plan area range from 680 to 2,100 feet above mean sea level, but the majority of land is located between 1,200 and 1,400 feet.

The aesthetics and visual resources goals of the *Auburn/Bowman Community Plan* relevant to the proposed Zoning Text Amendment include preserving the rural character of the area, including a harmonious coexistence between residential and agricultural uses; encouraging the development of industrial, commercial, and residential projects that complement the rural character; and preserving existing landforms, natural vegetation, and natural resources of the area as much as possible.

Policies that provide for attainment of these goals include limiting intensity of land uses based on considerations of impacts on adjoining properties due to night lighting; using natural land forms as buffers between potentially incompatible land uses; minimizing site grading; maintaining natural vegetation, especially trees; and using planned landscaping to shield views of all structures.

Foresthill General Plan

The goals and policies related to aesthetic resources of the Foresthill General Plan are expressed as goals and policies for preservation of open space areas and protection of scenic highways and other roadways. The goal of the Open Space Element of this plan is to "preserve valuable open space lands in order to maintain the natural features of the area." This goal is supported by policies that require preservation of natural areas along creeks and canals and encourage scenic or greenbelt corridors along major transportation routes. The goal of the Scenic Highways Section of the Transportation and Circulation Element of the Foresthill General Plan is to preserve and enhance the scenic resources visible from scenic routes in the plan area. Policies that support this goal and are applicable to the proposed Zoning Text Amendment include using existing County programs for protection of scenic corridors, such as the design review process and implementation of signage regulations, and providing for landscaping and landscaped mounding to screen unsightly views. In addition, the Community Development Element Land Use section identifies a goal of providing a pattern of commercial growth that meets the needs of the plan area residents. Policies that support this goal include maintaining the primary commercial center in the existing downtown area of the Foresthill Divide, discouraging strip commercial development along Foresthill Road, and requiring historic design control on all new commercial development or remodeling of old facilities.

Granite Bay Community Plan

The *Granite Bay Community Plan* area in the southeastern corner of western Placer County is bordered by Folsom Lake on the east, the City of Roseville on the west, and Sacramento County and the City of Folsom on the south. The topography is relatively flat, with rolling hills, rock outcroppings, and moderate to dense vegetation. Several natural watercourses of various sizes traverse the community.

The primary goal of the *Granite Bay Community Plan* Community Design Element is to "maintain the existing rural character of the area." This goal is supported through the provision of policies that establish design standards, which include preservation of native trees and existing vegetation, development of commercial project designs that do not detract from the rural character of the area, use of natural materials and colors, and use of landscaping to reduce the visual impact of all structures and fences.

Horseshoe Bar/Penryn Community Plan

The terrain in the *Horseshoe Bar/Penryn Community Plan* area varies from nearly flat and gently rolling to fairly steep hillsides. Elevations range from 200 to 1,200 feet above mean sea level, but the majority of the area is between 500 and 800 feet. Interstate 80 traverses this community plan area, from the City of Roseville on the southwest to the community of Newcastle on the northeast. Among the assumptions that shape the Community Plan is the understanding that "primary commercial services for the Plan area will be provided in Penryn, at the downtown area, and within the 'Penryn Parkway' area near Interstate 80 and Taylor Road. Limited commercial services are also provided in the eastern portion of the Plan area at the intersection of Auburn Folsom Road and Horseshoe Bar Road" (Placer County 1994).

The primary goals of the Community Design Element from the *Horseshoe Bar/Penryn Community Plan* are to preserve the community's unique character as a "scenic, tranquil, rural-residential community;" and to encourage that design of non-residential land uses incorporate elements reflective of the rural nature of the community, including "low building silhouette, large setbacks and buffer areas, extensive landscaping, and a pedestrian orientation." Policies that aid in attainment of these goals include retention of natural features as buffers between potentially incompatible land uses, conservation and preservation of natural waterways and drainage channels, limiting night lighting visible from a parcel's boundaries to the lighting necessary for "security, safety, and identification," requiring that all night lighting be low intensity and screed from view of adjacent residential areas, and considering "health and safety, impact on adjoining properties due to noise, traffic, night lighting, or other potentially disturbing conditions; and protecting natural land characteristics" when determining the appropriate intensity of use on individual parcels.

Penryn Parkway, located along Penryn and Taylor Roads, has been designated as the primary commercial area within the plan area. The *Horseshoe Bar/Penryn Community Plan* discourages the development of commercial land uses outside of Penryn Parkway in order to maintain a compact commercial core and eliminate the need for scattered commercial development in outlying areas where conflicts could arise between commercial and residential land uses.

Meadow Vista Community Plan

Meadow Vista is a rural residential community with limited commercial land uses. It is located at elevations ranging between 1,650 and 2,050 feet in a "flat meadowland surrounded by forested ridges and bisected by streams and waterways" (Placer County 1996). The Community Design section of this community plan establishes a goal of preserving and enhancing visual resources "by requiring high aesthetic quality in all new development." The majority of policies contained in the *Meadow Vista Community Plan* are the same as policies included in the *Placer County General Plan*. Within the Community Design section of this community plan, the policies relevant to development of plant nurseries in Meadow Vista include establishing a citizen design review committee, requiring that the architectural scale of non-residential buildings be similar to the scale of residential buildings, using landscaping to minimize appearance of all structures, and discouraging the use of solid fences. The *Meadow Vista Community Plan* also incorporates the Special District design guidelines for Meadow Vista that are included in the *Placer County Design Guidelines Manual*, which encourage the use of rustic, rural village style architecture with significant wall articulation and multi-planed roofs, use of natural materials and colors, and sign design appropriate to the community setting.

Dry Creek West Placer Community Plan

The Dry Creek West Placer Community Plan addresses aesthetics in the Community Design Element of this plan. The goals of this element relevant to the proposed Zoning Text Amendment include preserving natural landforms and vegetation, encouraging development of commercial project designs with elements that complement the rural character of the plan area (i.e., low building silhouette, large setbacks, extensive landscaping, pedestrian orientation), and maintaining heavily vegetated corridors along circulation routes. Policies that support these goals include retaining buffers between different, potentially incompatible uses, where possible; preserving natural features; protecting agricultural operations and land uses through the use of buffers; designing non-residential buildings to be of "small or moderate size;" limiting night lighting that is visible from the exterior of buildings to that necessary for security, safety, and identification; requiring that new projects comply with the Placer County Landscape Guidelines, the Placer County Design Guidelines, and specific design guidelines contained in the community plan; using landscaping to reduce the visual impact of all structures; discouraging large, bulky, unscreened structures, particularly if visible from the road; requiring use of natural materials on building exteriors; preserving native trees and using native drought tolerant plant materials in all landscaping; and using increased setbacks in place of sound wall construction where possible.

Design Guidelines

The Placer County Design Guidelines Manual, most recently revised in 1996, identifies design goals and objectives applicable to all development that is subject to Design Review approval. Throughout Placer County, Design Review is required for areas that carry zoning designations that include the Dc, Dh, and DR (Design Scenic Corridor, Design Historic, and Design Review) combining zones. The Design Guidelines Manual applies to the Dc and DR designations, while properties with a Dh combining zone designation must comply with the Placer County Historic Design Guidelines Manual. All three designations are very limited in the RA, RF, and F zones. A small area of RF-DR zoning occurs near the community of Cisco Grove, in eastern Placer County along the northern county line. Some parcels zoned RA with either a DR or Dh combining zone designation occur in the southwestern corner of Placer County (within the Dry Creek West Placer Community Plan area, while a few others are scattered in the area between Auburn and Roseville. Farm zoned parcels that carry a DR combining zone designation are generally located adjacent to residential areas or jurisdictional boundaries. For example, farm parcels in the southwestern corner of Placer County, adjacent to Sacramento and Sutter counties, are zoned F-B-X-DR, as are farm parcels adjacent to a large RA-B-100 zoned area near the northeast corner of the City of Roseville.

In addition to countywide design goals and objectives, the Design Guidelines Manual provides "Special District Guidelines" for the communities of Auburn/Bowman, Penryn, Meadow Vista, Granite Bay, and Newcastle. Future nursery development projects in the Dc and DR zones within those communities must comply with the specific guidelines for their community.

Placer County Sign Ordinance

Plant nurseries developed under the provisions of the proposed Zoning Text Amendment are expected to use signs to advertise the location of their business, especially Plant Nurseries, Retail. Sections 17.54.170 through 17.54.200 of the Placer County Code provide requirements and standards for signs. Section 17.54.170B states that "A sign permit shall be required for all

on-premises signs larger than fifteen (15) square feet in area; for all signs in combining -Dc, -Dh and -Ds zone districts; and for all off-premises signs. A building permit shall also be obtained for a sign, if required by Chapter 15 of this code (Construction Requirements)." Section 17.54.180 provides size, placement, lighting, and design standards for all on-premises signs. Section 17.54.190 provides requirements of off-premises signs. Compliance with these requirements will be a condition of issuance of a sign permit and will ensure that plant nursery signs do not result in negative aesthetic impacts on surrounding land uses.

5.3 PROJECT IMPACTS

Significance Criteria

Several factors can be used to determine a project's aesthetic effects, including existing and proposed views, visual character of the surrounding areas, screening or visual buffers, and the community's aesthetic values. Appendix G of the CEQA Guidelines provides that a project may be considered to have a significant environmental effect if it will:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings;
- Substantially degrade existing visual character or quality of the site and its surroundings; or
- © Create a new source of substantial light or glare adversely affecting day or nighttime views in the area.

Impacts Determined to Be Less than Significant

Substantial Adverse Effect on a Scenic Vista. Scenic vistas occur mainly in the central and eastern portions of Placer County where high mountain peaks, canyons, and ravines provide wide perspectives on large landscapes. Development along ridgelines or extensive grading and vegetation removal in portions of these large landscape areas could result in adverse effects on these scenic vistas. Construction of greenhouses, storage sheds, and shade structures associated with plant nurseries on hillsides could also block views of scenic areas from existing land uses, however, development of plant nurseries on hillsides is expected to be very limited. USDA research has shown that optimal conditions for plant nurseries include maximum slopes of 5% and proximity to consumers of the nursery products. These conditions indicate that the majority of plant nurseries developed under the proposed amendments will be located in the western and central areas of the county where scenic vistas are less common. As discussed in CHAPTER 2 PROJECT DESCRIPTION, it is anticipated that approximately 156 acres of new plant nurseries will develop under the proposed project. The limited amount of development expected to occur and the expectation that most of this development will occur in areas without scenic vistas ensure that the potential for impacts to scenic vistas as a result of the proposed project would be less than significant.

Substantial Damage to Scenic Resources. Scenic resources such as trees, rock outcroppings, and historic buildings occur throughout Placer County. Development of new land uses always has the potential to result in damage to or removal of these types of resources. Most new plant nursery development that could occur under the proposed project would require the issuance

of a use permit prior to development. Granting of a use permit is a discretionary approval, which would require additional environmental review pursuant to CEQA. This would allow for the implementation of site-specific mitigation measures as necessary. Use permits would be required of all future Plant Nurseries, Retail and Plant Production, Plus Nurseries except in the C2, C3, HS, and IN zones. Use permits would also be required of all future Plant Production Nurseries with a growing area that exceeds five acres in the RA and RF zones. Plant Production Nurseries with growing areas less than five acres in any zone (including RA and RF zones) and Plant Nurseries, Retail and Plant Production, Plus Nurseries in the C2, C3, HS, and IN zones would not require additional environmental review. C2, C3, HS, and IN zones provide for general, heavy, and highway commercial uses and industrial uses. These areas do not generally contain substantial scenic resources. The development of Plant Nurseries, Retail and Plant Production, Plus Nurseries in these zones will have less than significant impacts on scenic resources in Placer County. Development of Plant Production Nurseries in the RA and RF zones will have less than significant impacts on scenic resources due to the limited scale of development anticipated.

Potentially Significant Impacts

Impact 5.1 Substantial Degradation of Existing Visual Character of a Project Site and/or Adjacent Lands

Significance Before Mitigation	Potentially Significant	
Mitigation Measure	5.1a	
Significance After Mitigation	Less than Significant	

The proposed project would allow the development of plant nurseries, an agricultural land use, within commercial, industrial, and two residential zone districts. The mixing of land uses within some zone districts could degrade the existing visual character of the area in the vicinity of a project site by introducing incompatible land uses. Structures typically associated with plant nurseries include greenhouses, storage sheds, and shade structures. Designs for such structures will generally not be of the same style as designs for office buildings and single family residences.

Existing County standards that reduce the significance of this impact include minimum parcel sizes, setbacks, maximum site coverage, maximum building height, and landscaping requirements for each zone district as expressed in the *Placer County Zoning Ordinance*, the *Placer County Grading Ordinance*, and the *Placer County Land Development Manual*. For example, in the RA and RF zones, minimum front yard setbacks are 50 feet, while side and rear yard setbacks are 30 feet. Minimum parcel sizes for crop production land uses are 40,000 square feet (just under one acre), building heights are limited to 36 feet, and site coverage may be no more than 35%. These setbacks provide sufficient space for landscaping to soften the appearance of plant nursery structures, while the minimum parcel size and maximum coverage requirements would ensure that intensity of land development at a future project site would not exceed the intensity of surrounding development. The *Placer County Grading Ordinance* and the *Placer County Land Development Manual* require the use of landscaping in areas disturbed by grading. Compliance with these existing regulations for future plant nursery development is specifically required by Mitigation Measure 5.1a.

The proposed Zoning Text Amendment would require a use permit for Plant Production Nurseries in the RA and RF zones if the growing area exceeds five acres. This provision would allow for the site-specific review of large Plant Production Nurseries in the residential zones and provide for the implementation of mitigation measures as needed. Under the existing Zoning Ordinance, there is no such requirement for other crop production uses.

Under the proposed project, Plant Production, Plus Nurseries would be allowed to develop in the C2, C3, HS, and IN zones without a use permit. The proposed project would not change the permit requirements for Plant Nurseries, Retail, which can currently develop without a use permit in the C2, C3, HS, and IN zones. No adverse impacts with respect to aesthetics are expected to occur within the commercial zones because uses similar to these types of plant nurseries, such as many other retail businesses and crop production, are currently permitted within these zones.

Large warehouses, outdoor and indoor storage facilities, and buildings with limited detailing typically dominate lands within industrial zones, such as the area governed by the Sunset Industrial Area Plan. These areas are not considered to have sensitive visual characteristics. Therefore, no significant degradation of visual character would occur in the IN zone as a result of implementation of the proposed Zoning Text Amendment.

Plant Nurseries, Retail and Plant Production, Plus Nurseries would require issuance of a use permit in order to develop in other zones where they could locate. Under the proposed amendments, Plant Nurseries, Retail would be permitted uses in the C1, CPD, INP, AE, F, and FOR zones, where they are currently permitted uses. Plant Production, Plus Nurseries are proposed to be permitted in the same zones as well as in the RA, RF, OP, RES, AP, and BP zones. The issuance of the required use permits is a discretionary act by Placer County, therefore proposed Plant Nurseries, Retail and Plant Production, Plus Nurseries in these zones would require additional environmental review and implementation of site-specific mitigation measures as needed.

Impact 5.2 Substantial Increase in Light and Glare

Significance Before Mitigation	Potentially Significant	
Mitigation Measures	5.2a and 5.2b	
Significance After Mitigation	Less than Significant	

While the proposed project does not include any specific development, the implementation of the proposed Zoning Text Amendment would alter the regulations governing future plant nurseries. The development of new plant nurseries could introduce new sources of light and glare to a project site vicinity. This is especially a concern in residential zones and in areas influenced by airports (glare can create safety hazards for flight). In areas carrying a Dc, Dh, or DR combining zone designation, the Design Review process would identify any potential light spillage to adjacent land uses and any potential sources of glare created by a proposed project. In areas not carrying a Dc, Dh, or DR combining zone designations, mitigation for the potential impact of increased light and glare includes compliance with the *Placer County Airport Land Use Compatibility Plan* in addition to compliance with the setback, parcel size, building height, site coverage, and landscaping requirements of the *Placer County Zoning Ordinance, Placer County*

Grading Ordinance, and *Placer County Land Development Manual,* as expressed in Mitigation Measure 5.2b.

5.4 MITIGATION MEASURES

Substantial Degradation of Existing Visual Character of a Project Site and/or Adjacent Lands

Mitigation Measure 5.1a: All future nursery development shall comply with the Placer County Zoning Ordinance, Placer County Grading Ordinance, and the Placer County Land Development Manual with respect to front, side, and rear setbacks, minimum parcel sizes, maximum building height, maximum site coverage, and requirements for landscaping. (This measure is also listed as Mitigation Measure 4.1b.)

Substantial Increase in Light and Glare

- Mitigation Measure 5.2a: All future nursery development within an airport land use compatibility zone shall comply with all relevant requirements of the *Placer County Airport Land Use Compatibility Plan* with respect to light and glare.
- Mitigation Measure 5.2b: All future nursery development shall comply with the Placer County Zoning Ordinance, Placer County Grading Ordinance, and the Placer County Land Development Manual with respect to front, side, and rear setbacks, minimum parcel sizes, maximum building height, maximum site coverage, and requirements for landscaping. (This measure is also listed as Mitigation Measure 5.1a.)

CHAPTER 6

TRANSPORTATION AND CIRCULATION

CHAPTER 6 TRANSPORTATION AND CIRCULATION

6.1 SETTING

This section presents an overview of the County's transportation network and patterns as they relate to plant nurseries. Vehicles accessing plant nurseries include passenger cars, light trucks, delivery and sales trucks, and sometimes medium and heavy machinery. As the agricultural sector is a major component of the economy of Placer County, it is essential that the County's transportation network accommodate the trucks and machinery associated with crop production.

Major Roadways within the County

As shown on *Figure 2-1* in **CHAPTER 2 PROJECT DESCRIPTION** of this EIR, Interstate 80 (I-80) provides the main road link from the urbanized areas in the west, through the foothills in central Placer County, and to the mountain communities in the east. Several State Highways surround I-80, connecting various communities in Placer County. State Route 65 (SR 65), which links with I-80 between Roseville and Rocklin, provides access to the western and northwestern reaches of the county, including the City of Lincoln, the Sunset Industrial Area, and the town of Sheridan. SR 65 continues in a northwestern direction into Yuba County. At Lincoln, State Route 193 (SR 193) heads east from SR 65, providing access to Newcastle and Ophir. SR 193 terminates at I-80 just north of Newcastle. State Route 49 (SR 49) traverses Placer County in a roughly north-south direction, traveling through downtown Auburn and providing a connection between Nevada County on the north and El Dorado County on the southeast. State Routes 89 and 267 provide access to Lake Tahoe from I-80, while State Route 28 provides vehicular access around the perimeter of the lake.

Local Roadways

The *Placer County General Plan* establishes a three-tiered roadway classification system based on roadway function and connections. Classifications include local, collector, and arterial roadways. **Local streets** are those that provide direct access to adjacent land and connect to other local streets and larger roadways. Local streets typically carry very low traffic volumes. Traffic from local streets is "collected" on **collector roadways** and carried to larger roadways. Collector streets generally carry light to moderate traffic volumes. In urban/suburban areas, major collector roadways will generally carry higher traffic volumes than minor collectors and thus require more right-of-way and have greater access restrictions. Vehicles from local and collector roadways feed into **arterial roadways**, which provide connections to the State highway system and between communities and major activity centers. In urban/suburban areas, these roadways carry high traffic volumes and require substantial right-of-way. In rural areas the traffic volumes may not be as high, but these roadways do serve as primary access routes for through travel.

Within the areas of the county designated for rural residential land uses, traffic patterns tend to consist of low to moderate traffic volumes, a wide mix of vehicle types, and longer average trip lengths compared to urban areas. A greater percentage of roadways in rural areas lack well-defined shoulders, curbs, gutters, sidewalks, paving, and/or striping. Design speeds for rural collectors tend to be lower than for urban collectors. For example, the *Meadow Vista Community Plan* states, "it is not uncommon for a roadway within the Plan area to have a lot of crests and

sags, be winding, have narrow pavement and lane widths and/or have no shoulders" (Placer County 1996).

Plant Nursery Traffic Patterns

Most plant nurseries have seasonal fluctuations in business, with spring as the busiest season. Summer and fall business levels are moderate, and winter is slow. These fluctuations are somewhat dampened in Plant Nurseries, Retail, which sell houseplants, holiday decorations, and other accessory nursery items.

Plant Production Nurseries

Traffic patterns associated with Plant Production Nurseries are similar to other agricultural operations, like crop production. A large percentage of the traffic associated with Plant Production Nurseries is related to pick-ups and deliveries of supplies and nursery stock. During harvest of nursery stock, some use of medium and heavy equipment may occur. This is similar to harvest of crop stock, such as the use of tree shakers in nut tree orchards. Passenger car traffic is generated by employees and potentially generated by sales activities. Plant Production Nurseries tend to depend on both full-time and seasonal/part-time employees.

Plant Production, Plus Nurseries

Plant Production, Plus Nurseries include both plant production activities and sales of plants and accessory items. These nurseries also generate truck traffic related to sales and deliveries, equipment traffic during harvest times, and passenger car traffic related to employees and onsite sales. Sales related traffic is expected to be slightly higher at Plant Production, Plus, Nurseries compared to Plant Production Nurseries due to the permissibility of selling accessory nursery items.

Plant Nurseries, Retail

Plant Nurseries, Retail, traffic patterns are more similar to other retail land uses than crop production or agricultural land uses. The Institute of Transportation Engineers (ITE) average trip generation rate for a garden center, which is defined as "a free-standing building with a yard of planting or landscape stock" that primarily serves the general public, is 36.08 vehicle trip ends per day per 1,000 square feet of gross floor area. This number was based on studies of 11 garden centers, most of which ranged between 1,000 and 10,000 square feet of gross floor area, with one nursery at 13,000 square feet and one at 50,000 square feet. The ITE trip generation information for a wholesale nursery is based on only one observation, which limits the statistical validity of this data. However, the ITE trip generation rates are the standard measure of traffic impacts for land development, so it is appropriate to consider this information. The trip generation rate for wholesale nurseries is estimated at 39 vehicle trip ends per day per 1,000 square feet of gross floor area.

In addition to the ITE trip generation data for wholesale nurseries, the existing Broken Arrow Wholesale Nursery has been tracking their trip generation data since December 2002. This self-reported data accounting for all traffic to and from the nursery, including truck/equipment traffic and sales related traffic, shows total monthly trip ends ranging between 156 and 336, with the lowest number occurring in December and the highest in June. A total of 156 trips in one month corresponds to an average of 5.2 trip ends per day, while a monthly total of 336

corresponds to an average of 11.2 trip ends per day. Within these total numbers of trip ends, truck trips generally account for eight trip ends per month, while many more trips are attributed to the nurseries' 24-foot box van, flat bed truck, and pick-up trucks. These vehicles account for between 80 and 142 trip ends per month, or approximately half of the total trips reported.

6.2 REGULATORY FRAMEWORK

Placer County Zoning Ordinance

Sections 17.54.040 and 17.54.050 of the *Placer County Zoning Ordinance* establish off-street parking standards and requirements for development in Placer County. The parking standards address the type, size, and location of parking spaces required of new development, and indicates the numbers of accessible spaces required per total number of spaces onsite. The parking standards also require that bicycle racks be provided for each twenty parking spaces in a lot.

The numbers of parking spaces required for new development are determined based on land use. Currently, one parking space per 2,000 square feet of land area is the parking requirement for plant nurseries, as they are presently defined. The proposed Zoning Text Amendment would modify this requirement to specify that it only applies to Plant Nurseries, Retail. Parking requirements for agricultural processing and equestrian facilities are also identified. Other agricultural activities (i.e., crop production) are subject to Section 17.54.050B(1), which states, "improved off-street parking spaces are not required, as long as sufficient usable area is provided to meet the parking needs of all employees, visitors, and loading activities entirely on the site of the use." In cases where use permits are required, parking standards would be specified by conditions of approval.

Placer County General Plan

Traffic conditions are measured by determinations of "levels of service" (LOS), which are letter grades "A" through "F" that indicate the quality of traffic operating conditions. LOS determinations are based on a number of factors, including travel time and speed, safety, freedom to maneuver, and driving comfort and convenience. Under the *Placer County General Plan*, the County has set a standard of LOS "C" or better for its roadway system. Consequently, LOS "A", "B", and "C" are considered acceptable, while "D", "E" and "F" are unacceptable. Within one-half mile of a state highway, LOS "D" will be considered acceptable. Table 6.1 provides definitions for levels of service for signalized intersections.

Table 6.1
Level of Service Definitions - Signalized Intersections

LOS	V/C ^a	Description
А	0.00-0.60	Free Flow / Insignificant Delays: No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.
В	0.61-0.70	Stable Operation / Minimal Delays: An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted.
С	0.71-0.80	Stable Operation / Acceptable Delays: Major approach phases fully utilized. Most drivers feel somewhat restricted.

LOS	V/C ^a	Description
D	0.81-0.90	Approaching Unstable / Tolerable Delays: Drivers may have to wait through more than one red signal indication. Queues may develop but dissipate rapidly, without excessive delays.
E	0.91-1.00	Unstable Operation / Significant Delays: Volumes at or near capacity. Vehicles may wait through several signal cycles. Long queues form upstream from intersection.
F	>1.00	Forced Flow / Excessive Delays: Represents jammed conditions. Intersection operates below capacity with low volumes. Queues may block upstream intersections.

a V/C = volume-to-capacity ratio

Source: Circular 212, Transportation Research Board 1981

Auburn/Bowman Community Plan

The Traffic Circulation Element of the *Auburn/Bowman Community Plan* includes the goals of providing a safe and efficient transportation network that serves the needs of residents as well as the economy, encouraging the use of alternative transportation and transportation system management (i.e., flex time, park and ride lots), coordinating the plan area transportation network with those of surrounding communities, and providing a network of multi-use trails and public transportation opportunities. This community plan also requires a minimum roadway LOS of "D" or better within one-half mile of a state highway and "C" or better elsewhere. Table 17 of the plan lists areas where exceptions to this LOS policy are allowed. Other policies of the *Auburn/Bowman Community Plan* include establishing minimum right-of-way criteria for area roadways, requiring new development to provide off-street parking, collection of traffic mitigation fees from all land development at the time of issuance of building permits, preventing overuse of residential roadways, and provision of facilities for multi-use trails and public transportation.

Foresthill General Plan

The main roadway serving Foresthill is Foresthill Road (previously named "Auburn-Foresthill Road"), which runs from the City of Auburn to the northeast, through the town of Foresthill, to Soda Springs in the east. Other roads serving Foresthill include Ponderosa Way and Colfax-Foresthill Road connecting to the Colfax/Weimar area, and Mosquito Ridge Road providing access to the recreation and open space lands of the Sierras to the south and east. The Foresthill General Plan calls for a transportation system serving the needs of agricultural, commercial, industrial, and residential land uses. The goals of the Transportation and Circulation element are to provide a transportation system that supports social, economic, and environmental health of Plan area residents, and to preserve and enhance the scenic resources visible from two designated scenic routes, Auburn-Foresthill Road and Ruck-A-Chucky Route. Policies that support these goals relevant to the proposed Zoning Text Amendment include maintaining a safe and efficient level of service; using design review of proposed projects to protect and enhance scenic roads, including sign controls, scenic setbacks, and landscaping; requiring undergrounding of utilities; using "aesthetic design considerations" in road construction; and providing for safe road service levels.

Granite Bay Community Plan and Horseshoe Bar/Penryn Community Plan

The goals expressed in the Transportation/Circulation Element of the Granite Bay Community Plan and in the Circulation Element of the Horseshoe Bar/Penryn Community Plan include

preservation of scenic routes throughout the plan areas, provision of a safe and efficient transportation network that minimizes development of arterial highways and overuse of residential roadways, attainment of LOS "C" conditions, and provision of multi-use trails and public transportation opportunities. Both community plans establish LOS "C" as the minimum allowable service level throughout the plan area, while recognizing that temporary violations of this standard may occur until adequate funding is collected to fund all necessary improvements. Other policies include collecting traffic mitigation fees from all land development projects at the time of issuance of building permits, using high standards of design to maintain a rural environment while ensuring road safety, discouraging on-street parking, and encouraging development of an integrated, safe, and convenient system of trails and alternative transportation facilities.

Meadow Vista Community Plan

The transportation and circulation goals of the *Meadow Vista Community Plan* are similar to those identified in the *Granite Bay* and *Horseshoe Bar/Penryn Community Plans*. The Transportation/Circulation Element of the *Meadow Vista Community Plan* also establishes LOS "C" as the minimum allowable service level for most roads in the plan area. However, it also allows LOS "D" to occur within one-half mile of Interstate 80, which passes along the eastern boundary of the plan area.

Dry Creek West Placer Community Plan

The goals of the *Dry Creek West Placer Community Plan* Transportation and Circulation Element include preserving existing residential routes as safe and scenic roadways, providing safe and "reasonably convenient" travel throughout the plan area, avoiding development of arterial roadways that could adversely affect the rural character of the plan area, and ensuring a minimum LOS "C" throughout the plan area. Policies that support these goals include designing new roads and roadway improvements to preserve the scenic and rural qualities of the area; ensuring that roadway rights-of-way are sufficient to accommodate trails, bikeways, drainage and other public utilities, and landscaping; minimizing street lighting, traffic signals, and signage; requiring that new development provide off-street parking; maintaining LOS C or better on all plan area roadways; requiring that new development contribute a fair-share amount to construction of projects identified in the Capital Improvement Program and pay traffic mitigation fees at the time of issuance of building permits; and designing new development to minimize the number of access points onto major roadways.

Placer County Improvement Standards

Roadway improvements within Placer County must conform to a set of standard plans contained in the County's *Land Development Manual* which details County standards for pavement width, lighting, drainage, sewer, and other roadside facilities. Roadway facilities associated with any future development occurring under the proposed Zoning Text Amendment must meet or exceed these standards.

Placer County Capital Improvement Program (CIP)

Placer County's Capital Improvement Program (CIP) prescribes the phasing of roadway improvements that are needed to meet the County's LOS standards over a 20 year period. The CIP was updated in 1994 concurrent with the updates to the *Placer County General Plan*.

The improvements included in the CIP are funded through the imposition of fees on new development. Fees are calculated pursuant to the requirements expressed in Sections 15.28.030 and 15.28.040 of the Placer County Code. "Fees for all development projects which require building permits shall be paid prior to the issuance of building permits. Fees for new development projects, which do not require building permits, shall be paid before any other applicable county approval is made final" (Section 15.28.030C).

6.3 IMPACTS

Significance Criteria

A transportation or circulation impact would be significant if any of the following conditions, as identified in Appendix G of the CEQA Guidelines and in the Placer County policies and plans described above, would result with implementation of the proposed project:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- Exceed, either individually or cumulatively, the level of service standard established for Placer County Placer County uses a LOS "C" standard for county roadways, except for those county roadways within one-half mile of a state highway, where LOS "D" is permitted;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses;
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- © Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Project Impacts

Impacts Determined to be Less than Significant

Substantial Increase in Traffic and/or Violation of Level of Service Standards. The permissibility of locating and operating Plant Nurseries, Retail, would not change with implementation of the proposed project. Therefore the project would result in no impacts to traffic volumes and roadway LOS due to traffic generated by Plant Nurseries, Retail. Plant Production, Plus Nurseries would be designated as an allowed use in the C2, C3, HS, and IN zones. This would result in less than significant impacts to traffic volumes and roadway LOS because traffic generated by Plant Production, Plus Nurseries is expected to be less than that generated by Plant Nurseries, Retail, which are already allowed uses in these zones. The proposed Zoning Text Amendment would require the issuance of a use permit for new Plant Production, Plus Nurseries located in other zone districts, which would allow for implementation of site-specific mitigation measures as necessary to avoid or minimize traffic volume and roadway LOS impacts. Plant Production, Plus Nurseries could locate in the RA,

RF, C1, CPD, OP, RES, AP, BP, INP, AE, F, FOR, O, and TPZ zones upon issuance of a use permit.

As discussed briefly in Section 6.1, Plant Production Nurseries are expected to have similar traffic generation patterns to crop production land uses such as ranches, dairies, fruit orchards and fields, and nut tree groves. These land uses tend to have low rates of employees per acre, with seasonal increases in employees for crop harvesting, processing, and sales/distribution. Under the proposed project, Plant Production Nurseries would be designated as an allowed use in those zones where crop production is currently allowed. In the commercial, industrial, and agricultural zones, no impact on traffic volumes or roadway LOS is expected because traffic generation of Plant Production Nurseries is anticipated to be the same or lower than existing allowed uses in those zones. In the RA and RF zones, where Plant Production Nurseries with growing areas less than five acres would be allowed without a use permit, trip generation rates are expected to be similar to the reported traffic volumes associated with the Broken Arrow Wholesale Nursery, which has a peak of 11.2 trips per day in the spring and summer and a low of 5.2 trips per day in the winter. These counts account for all traffic to and from the nursery, including truck traffic. The ITE generation rate for single-family residences is approximately 10 trip ends per day per family. Therefore, Plant Production Nursery trip generation would be very similar to the existing trip generation in the RA and RF zones. Thus, there will be no significant increases in traffic volumes or decreases in roadway LOS as a result of the traffic generation from Plant Production Nurseries.

Additionally, Plant Production Nurseries with greater than five acres of growing area located in an RA or RF zone would be permitted subject to the requirements of a Minor Use Permit. The use permit process would include preparation of a project-specific traffic analysis and allow for the implementation of any necessary mitigation measures to ensure traffic conditions in residential areas are not significantly impacted by the operation of large Plant Production Nurseries. This requires a greater level of review than currently occurs for other crop production land uses in the RA and RF zones.

Result in a Change in Air Traffic Patterns. The proposed Zoning Text Amendment would alter the land development requirements associated with plant nurseries and would have no impact on air traffic patterns or safety.

Substantially Increase Hazards Due To A Design Feature Or Incompatible Uses. The proposed project involves no specific construction or roadway project and will not result in design feature hazards. The project will not change the permissibility of locating or operating Plant Nurseries, Retail; while Plant Production, Plus Nurseries will either follow the permit requirements of Plant Nurseries, Retail, or obtain a Minor Use Permit in zones where Plant Nurseries, Retail, are not permitted but Plant Production Nurseries are. The use permit approval process would include project-specific review of potential safety and hazard impacts of new development.

Truck and machinery traffic to and from Plant Nurseries, Retail, and Plant Production, Plus Nurseries, is similar to such traffic associated with other land uses in the C2, C3, HS, and IN zones where these nurseries would be allowed without the issuance of a use permit. Therefore the proposed project will have no impact on roadway hazards in these zones due to incompatibility between land uses.

Location and operation of Plant Production Nurseries in agricultural, commercial, and industrial zones where crop production is currently an allowed use will not result in any impacts related to roadway hazards because the truck and machinery traffic associated with Plant Production Nurseries is similar to such traffic associated with other land use activities that currently occur in these zones. Operation of Plant Production Nurseries in the RA and RF zones could introduce new truck and machinery traffic to residential areas that currently experience very low amounts or none of this type of traffic. Mixing of children and residential traffic with plant nursery traffic could result in potentially significant safety impacts. However, truck and machinery traffic associated with small Plant Production Nurseries, those with growing areas less than five acres, will generate very low numbers of trips per day, which will minimize the mixing of such traffic with residential traffic and children. Large Plant Production Nurseries will require the issuance of a use permit, which will allow for the implementation of project-specific mitigation measures as necessary to ensure safety.

Result in Inadequate Emergency Access. As discussed above, the proposed project would not change the permissibility of developing Plant Nurseries, Retail and would allow Plant Production, Plus Nurseries only in zones that currently allow similar land uses. Other Plant Production, Plus Nurseries development would require issuance of a use permit, which would allow for the implementation of project specific mitigation measures. Plant Production Nurseries would be allowed in zones where crop production is currently allowed. Crop production and Plant Production Nurseries have similar traffic generation patterns and needs for emergency access. Large Plant Production Nurseries (growing area greater than five acres) located in residential zones would require a use permit. This would ensure that project-specific mitigation measures can be implemented if operation of a large plant nursery would result in significant emergency access impacts to a residential area. As the proposed project does not change the types of land uses that are allowed or permitted in the zone districts affected by the proposed Zoning Text Amendment, there will be no impacts to emergency access throughout the county as a result of implementation of the proposed project.

Result in Inadequate Parking Capacity. The proposed project does not include any specific construction projects. The proposed Zoning Text Amendment includes establishment of a parking requirement for Plant Nurseries, Retail. This will ensure that adequate parking will be provided for all Plant Nurseries, Retail developed under the proposed project. Parking demand for Plant Production Nurseries and Plant Production, Plus Nurseries is typically related to the number of employees. Demand for other parking spaces is very low and development of new nurseries of these types will not result in significant parking demands. Additionally, most Plant Production, Plus Nurseries and all large Plant Production Nurseries located in residential zones will require issuance of a use permit, which will allow for adoption of mitigation measures as necessary to ensure adequate parking.

Conflict with Adopted Policies, Plans, or Programs Supporting Alternative Transportation. Plant nurseries of any type do not generate significant demand for alternative transportation. Purchases made at plant nurseries are typically of materials that cannot be easily transported by bicycle or bus. No impacts related to alternative transportation will result from implementation of the proposed Zoning Text Amendment.

6.4 MITIGATION MEASURES

As there are no potentially significant impacts related to increases in traffic volumes, decreases in roadway LOS, safety, parking, air traffic, or alternative transportation, no mitigation measures are necessary.

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CHAPTER 7

AIR QUALITY

CHAPTER 7 AIR QUALITY

7.1 SETTING

The California Air Resources Board has designated fifteen Air Basins across the state to facilitate monitoring of air quality and enforcement of air quality standards. Basin boundaries were developed in recognition of both geographic features and existing political boundaries. Placer County lies mostly within the Mountain Counties Air Basin, with areas of western Placer County in the Sacramento Valley Air Basin. The area around Lake Tahoe forms the Lake Tahoe Air Basin.

Air quality in Placer County is influenced by both local and distant emission sources as well as prevailing weather patterns. Local pollutant sources include the emissions from vehicle traffic on roadways within the county, most significantly the major transportation corridors of Interstate 80, State Route 65, and State Route 49. Residential land uses generate local sources of air pollutants such as landscaping maintenance, woodstoves, barbeques, and use of consumer products such as cleaning supplies and personal care products (i.e., aerosol hairspray). Agricultural, commercial, and industrial land uses also create pollutant sources such as the emissions generated by pesticide use, agricultural burning and earth-moving practices, commercial and retail businesses such as dry cleaning, gas stations, and painting, and industrial manufacturing and materials processing.

Distant emission sources include the vehicle traffic and various agricultural, residential, commercial, and industrial land uses in the Sacramento metropolitan area and San Francisco Bay Area. Carried through lower Placer County and into the foothills region by the prevailing southwesterly winds found in the valley, pollutants emitted in Sacramento and the San Francisco Bay Area affect local ambient pollutant concentrations. Inversion layers created by seasonal temperatures contribute to seasonal concentrations of airborne contaminants. These inversion layers typically occur in the foothills where cool air from higher elevations prevents the continued northeasterly movement of warmer air from the valley.

Climate

Mild, wet winters and hot, dry summers characterize the climate of central and western Placer County. Precipitation generally occurs between November and April. Eastern Placer County experiences colder winters with greater amounts of precipitation, including snow. Summer temperatures are more moderate than in western Placer County, and occasional thunderstorms bring some precipitation. Prevailing winds are from the south and southwest, and local air quality is influenced by the transportation of emissions from upwind mobile and stationary pollution sources in the Sacramento metropolitan area and the San Francisco Bay area. Additionally, in the late fall and early spring the Sacramento Valley Air Basin frequently experiences calm atmospheric conditions, causing inversion layers that restrict vertical dispersion of pollutants. This results in higher concentrations of pollutants near ground level.

Air Contaminants

Ozone (O_3) , carbon monoxide (CO), and particulate matter (PM_{10}) are pollutants of particular concern in the area. As discussed in Section 7.2, the California Air Resources Board has established air quality standards for these pollutants. The Air Resources Board evaluates each

County and air basin for their level of compliance with these standards, using the following designations:

- <u>Unclassified</u>: an area is designated unclassified for a particular pollutant if the data are incomplete and do not support a designation of attainment or non-attainment.
- <u>Attainment</u>: an area is designated attainment for a pollutant if the state standard for that pollutant was not violated at any site in the area during a three-year period.
- <u>Non-attainment:</u> an area is designated non-attainment for a particular pollutant if there was at least one violation within the previous three years of a State standard for that pollutant in the area.
- Non-attainment/Transitional: is a subcategory of the non-attainment designation. An area is designated non-attainment/transitional to signify that the area is close to attaining the standard for that pollutant. (Air Resources Board 2002a)

Typically attainment designations are made for an entire air basin for ozone, nitrogen dioxide, PM_{10} , sulfates, and visibility reducing particles while designations are made county-by-county for carbon monoxide, sulfur dioxide, lead, and hydrogen sulfide. However, the Air Resources Board may use other physical or political boundaries to designate portions of an air basin or county if air quality is distinctly different. Factors such as the location of contributing emission sources, the meteorology, and the topographic features may influence this decision.

Under the air quality standards mandated by the California Clean Air Act, Placer County is currently in non-attainment for particulate matter and is designated as serious non-attainment for ozone. South Placer County is a federal maintenance area for CO standards. This region was in non-attainment for federal CO standards until 1998. As shown in the tables included in this discussion, violations of ozone and particulate matter standards have occurred and continue to occur within Placer County.

Ozone

O₃ concentrations that exceed state standards primarily occur between May and October when inversion layers are formed and "sunlight and hot weather cause ground-level ozone to form in harmful concentrations" (U.S. Environmental Protection Agency [EPA] 2000a). O₃ itself is not a direct emission. It results from atmospheric chemical reactions between reactive organic compounds (ROC) and nitrogen oxides (NO_X), which are discharged into the air from motor vehicle emissions and the evaporation of various organic compounds (e.g., fuels and solvents). Rather than being the result of a few significant emission sources, O₃ concentrations are the cumulative effect of regional development patterns and associated traffic movements. Current projections for 2005 summer emissions show that 72% of the O₃-forming emissions within the Sacramento federal O₃ non-attainment area will come from mobile sources, including on-road vehicles, off-road equipment, farm equipment, boats, aircraft, trains, and heavy duty trucks, while stationary/area sources, such as power plants, consumer products, coating and cleaning solvents, agricultural pumps, and petroleum production and marketing will contribute 28% of the emissions (Sacramento Metropolitan Air Quality Management District [SMAQMD] 2003). Generally, the NO_X concentration is similar to the O₃ concentration, and O₃ levels rapidly decline once the precursors have been depleted. Table 7.1 shows measured O3 levels in the project vicinity. There has been a decline in the average number of days that measured O₃

levels in the region exceeded the California standards of 0.09 parts per million (ppm) since 1992. "The overall rate of population exposure to ozone is down, and the number of days and hours over the standard are also trending down" (SMAQMD 2003). The average number of days above the standard between 1992 and 1997 are 21.83 and 25.83 for the Auburn and Rocklin stations, respectively, and 20.75 and 17.60, respectively, between 1998 and 2002. Since 2000, the Colfax station has not recorded any days above state or federal standards for O_3 .

Table 7.1 Air Quality Data Summary, 1992-2001 Ozone Levels (ppm)

		Day	s above Sta	andard	1-Hour O	bservations	8-Hour Averages	
Station	Year	1- State	-Hour Federal	8-Hour Federal	Maximum	3-Year Average 4 th Highest	Maximum	3-Year Average 4 th
Otation	1992	36	3	26	0.140	0.140	0.122	<i>Highest</i> 0.105
	1993	15	0	15	0.120	0.130	0.122	0.103
	1993	28	4	25	0.120	0.130	0.107	0.101
	1995	26	2	18	0.148	0.131	0.119	0.105
	1996	22	1	17	0.125	0.131	0.110	0.103
Auburn	1997	4	0	1	0.106	0.124	0.089	0.095
	1998	15	5	16	0.144	0.126	0.113	0.095
	1999	24	2	25	0.142	0.132	0.106	0.097
	2000	22	0	17	0.124	0.132	0.107	0.102
	2001	22	0	21	0.118	0.123	0.107	0.101
	2002	16	3	15	0.136	0.124	0.115	0.101
	1992	41	7	24	0.170	0.130	0.122	0.102
	1993	21	3	9	0.150	0.140	0.120	0.101
	1994	29	1	19	0.128	0.140	0.106	0.103
	1995	25	3	17	0.146	0.133	0.106	0.100
	1996	30	1	20	0.130	0.129	0.110	0.100
Rocklin	1997	9	0	4	0.113	0.129	0.096	0.095
	1998	16	3	12	0.143	0.130	0.119	0.094
	1999	17	3	11	0.128	0.128	0.111	0.092
	2000	16	0	12	0.118	0.128	0.098	0.093
	2001	18	1	8	0.128	0.127	0.097	0.091
	2002	21	2	15	0.135	0.119	0.111	0.092
	1992	17	1	12	0.130	0.110	0.098	0.092
	1993	9	0	4	0.120	0.110	0.097	0.092
	1994	15	0	12	0.122	0.120	0.107	0.092
	1995	16	1	11	0.130	0.119	0.100	0.092
Colfax	1996	4	0	5	0.108	0.117	0.091	0.091
	1997	2	0	2	0.10.	0.109	0.097	0.086
	1998	11	1	8	0.132	0.103	0.108	0.086
	1999	9	1	9	0.159	0.105	0.093	0.86
	2000	10	0	5	0.119	0.115	0.095	0.089

		Days above Standard		1-Hour O	bservations	8-Hour Averages		
		1-	-Hour	8-Hour		3-Year		3-Year
Station	Year	State	Federal	Federal	Maximum	Average 4 th Highest	Maximum	Average 4 th Highest
Colfax	2001	0	0	0	0.044	0.106	NA	NA
Collax	2002	0	0	0	0.044	0.106	NA	NA
	1992	NA	NA	NA	NA	NA	NA	NA
	1993	14	3	7	0.150	0.120	0.110	0.103
	1994	19	0	8	0.124	0.124	0.098	0.096
	1995	18	2	8	0.135	0.134	0.102	0.097
	1996	24	2	12	0.135	0.131	0.108	0.096
Roseville	1997	7	0	2	0.111	0.131	0.091	0.093
	1998	20	5	12	0.153	0.131	0.117	0.093
	1999	14	2	9	0.136	0.129	0.113	0.089
	2000	13	1	8	0.128	0.129	0.100	0.093
	2001	13	0	9	0.122	0.122	0.102	0.090
	2002	21	2	11	0.131	0.122	0.105	0.092

NA no data available

Source: California Air Resources Board 2003a

Carbon Monoxide

"Carbon monoxide, or CO, is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56 percent of all CO emissions nationwide," while in urban areas, as much as 85 to 95 percent of CO emissions may be from mobile sources (EPA 2000b). High concentrations of CO are generally a localized wintertime pollution problem, the result of a combination of traffic volumes, traffic congestion, and atmospheric conditions. Increased potential for air quality standards violations occurs when vehicles are in a "cold start" operating mode, idling, or at low speeds. Congested intersections are usually the "hot spots" where violations occur. These violations are normally short-term as CO tends to dissipate rapidly into the atmosphere. Monitoring stations to measure CO concentrations are located throughout both the Sacramento Valley Air Basin and the Mountain Counties Air Basin. State standards for CO concentrations are 20 ppm in a 1-hour period and 9 ppm over an 8-hour period. The state and federal 8-hour average standards for CO have not been exceeded in the Mountain Counties Air Basin since it began measuring CO in 1989, while the last violations in the Sacramento Valley Air Basin were recorded in 1993, when there were two days during which the standards were exceeded. In 1991, CO concentrations in excess of state standards occurred on nine days and exceedances of federal standards occurred on six days (Air Resources Board 2003b). The monitoring station in Placer County is located on North Sunrise Boulevard in Roseville.

Particulate Matter

Particulate matter is a type of air pollution that consists of varying mixtures of particles suspended in the air. Particulate matter less than 2.5 microns in diameter is referred to as $PM_{2.5}$, or fine particles. Particulate matter between 2.5 and 10 microns in diameter is referred to as PM_{10} , or coarse particles. (In comparison, a human hair is about 75 microns in diameter.) Both

the State of California and the EPA regulate coarse particles, while only the EPA regulates fine particles. The EPA's fine particle standard was adopted in July 1997 and is being phased in over six years. The air quality monitoring station on North Sunrise Boulevard in Roseville recorded one day above the national standard for PM_{10} in 1999 (Air Resources Board 2003c).

Major sources of coarse and fine particles include agricultural burning, construction activities, wood burning stoves, vehicle exhaust, wind-blown dust, vehicles traveling on unpaved roads, materials handling, and crushing and grinding operations. Particulate matter emissions can result in environmental effects such as reduced visibility, water pollution (as particulates settle out of the air and into water bodies), degradation of vegetation (as particulates settle on leaves as dust), and damage to structures (EPA 2000c). Particulate matter can injure crops, trees, and shrubs, as well as cause damage to other surfaces, such as metal and fabrics, through chemical reactions. Fine particles also impair visibility by scattering light and reducing the visual range in urban, rural, and wilderness areas. The haze caused by fine particles can diminish crop yields by reducing sunlight.

State standards for PM_{10} are 50 micrograms per cubic meter ($\mu g/m^3$; a microgram is one one-millionth of a gram) averaged over a 24-hour period and 30 $\mu g/m^3$ for an annual geometric mean. The federal standard is 150 $\mu g/m^3$ for a 24-hour period. The federal standard for $PM_{2.5}$ is 65 $\mu g/m^3$ measured over a 24-hour period and 15 $\mu g/m^3$ averaged over a year. *Table 7.2* presents measured PM_{10} levels at area sampling stations. As shown, these measured PM_{10} levels have exceeded the California standard several times since 1992. No $PM_{2.5}$ monitoring stations currently exist in Placer County.

Table 7.2 Air Quality Data Summary, 1992-1996 Measured PM₁₀ Levels (µg/m³)

Station	Year	State	Federal	Annual	Geometric	3-Year Average	Maximum Observation
	1991	6	NA	45.7	7.1	NA	55
	1992	0	NA	25.9	15.7	NA	48
	1993	0	0	20.3	21.3	15	41
	1994	3	0	21.8	23.1	20	51
	1995	3	0	20.8	21.5	22	55
Rocklin	1996	0	0	16.6	18.3	21	34
ROCKIII	1997	0	0	19.0	19.9	20	43
	1998	1	0	16.6	19.4	19	70
	1999	24	0	21.3	24.8	21	75
	2000	0	0	19.8	20.8	22	46
	2001	12	0	18.8	20.9	22	57
	2002	0	NA	20.2	21.7	21	36

Station	Year	State	Federal	Annual	Geometric	3-Year Average	Maximum Observation
	1993	6	0	23.4	24.3	NA	52
	1994	15	0	23.3	25.0	NA	65
	1995	6	0	22.8	23.4	24	61
	1996	0	0	19.2	20.8	23	39
Roseville	1997	0	0	20.8	21.8	22	50
Noseville	1998	13	0	19.4	22.3	22	67
	1999	24	0	22.5	26.1	23	89
	2000	6	0	22.1	23.9	24	58
	2001	18	0	21.8	24.2	25	59
	2002	6	0	22.1	24.6	24	58
	1988	0	NA	35.0	3.3	NA	35
	1996	0	NA	15.9	21.8	NA	49
Truckee ^a	1997	62	NA	27.4	31.0	NA	136
HUCKEE	1998	18	NA	21.9	22.1	25	71
	1999	0	NA	25.9	27.9	27	44
	2000	0	NA	19.2	14.6	22	50

NA no data available

a No data available for this station between 1989 and 1995.

Source: California Air Resources Board 2003c

Health Effects

Air pollution affects everyone to some degree, however pregnant women, children, the elderly, and people with respiratory or cardiovascular disease are more susceptible to experiencing health effects from air pollution. Even at low concentrations, ground-level O₃ can adversely affect everyone (EPA 2000a); it can damage vegetation, crack rubber, and irritate the lungs and respiratory system when inhaled. At higher concentrations, O₃ can impact public health by directly affecting the lungs, causing respiratory irritation and reduction in lung function. Lung flow and air passage through lung tissues can be seriously decreased, resulting in symptoms such as coughs, chest discomfort, headaches, and eye irritation. "Repeated exposure to ozone pollution for several months may cause permanent lung damage" (EPA 2000a). Persons suffering from asthma, bronchitis, other respiratory ailments, and cardiovascular disease are particularly susceptible to O₃, as well as children and persons engaged in heavy exercise, but "even healthy people that are active outdoors can be affected when ozone levels are high" (EPA 2000a). At high concentrations, this pollutant can cause severe damage to the lungs.

Inhaled CO passes through the lungs to enter the blood stream, interfering with the transfer of oxygen to the blood. This reduces the amount of oxygen that reaches the muscles, including the heart, brain, and other body tissues – resulting in adverse cardiovascular and central nervous system effects. Even in healthy adults, CO inhalation can result in drowsiness, fatigue, inability to concentrate, nausea, headache, changes in heart function, impairment of vision, and slowed reflexes. At very high concentrations, CO inhalation can be fatal (EPA 2000b).

Particulate matter causes harm when inhaled particulates lodge deep within the lungs, causing health problems as the human immune system reacts to the presence of these foreign particles. Fine particles can lodge deeper within the lungs than coarse particles, posing a more serious health threat. Scientific studies have linked inhaled PM to several significant health problems, including "aggravated asthma, increases in respiratory symptoms like coughing and difficult or painful breathing, chronic bronchitis, decreased lung function, and premature death" (EPA 2000c). Very small particulates of certain substances can cause direct lung damage or can contain absorbed gasses that may be injurious. Populations that are especially sensitive to the health effects of exposure to PM include children, the elderly, exercising adults, individuals with influenza, asthmatics, and those who suffer from chronic obstructive pulmonary disease. "Health problems for sensitive people can get worse if they are exposed to high levels of PM for several days in a row" (EPA 2000c), and "both short- and long-term exposures to PM have been shown to lead to harmful health effects" (Air Resources Board 2003b). Recent studies suggest that prolonged exposure to PM may affect the growth and functioning of children's lungs; other studies have found an association between fine particle air pollution and premature death related to decreases in cardiopulmonary functions. "In addition, scientists have observed higher rates of hospitalizations, emergency room visits and doctor's visits for respiratory illnesses or heart disease during times of high PM concentrations" (Air Resources Board 2003b).

7.2 REGULATORY FRAMEWORK

Western Placer County is located in the Sacramento Valley Air Basin, while the central and eastern regions of Placer County are located in the Mountain Counties Air Basin. The area surrounding Lake Tahoe comprises the Lake Tahoe Air Basin. Placer County's Air Pollution Control District (APCD) has the primary responsibility for attainment and maintenance of state and federal air quality standards within their jurisdiction, which covers all of Placer County. Portions of the County are also subject to the regulations of the Sacramento Air Quality Maintenance Area and the Tahoe Regional Planning Agency. Both the California Air Resources Board and the EPA have established and published air quality standards as shown in *Table 7.3*. In 1991, the Placer County APCD developed the *Air Quality Attainment Plan*, which presents mitigation strategies for reducing emission concentrations and to meet state and federal air quality standards in all three air basins of which Placer County is a part.

Federal and State Air Quality Regulations

On both the federal and state levels, a distinction is made for regulatory purposes between "criteria air pollutants" and "toxic air pollutants." Criteria air pollutants are those for which health-based concentration standards were first promulgated under the 1970 amendments to the Federal Clean Air Act. Regulation of criteria air pollutants is achieved through federal and state ambient air quality standards (AAQS) and emission limits for individual sources. Air toxics, also referred to as Hazardous Air Pollutants, are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic) adverse human health effects. Hazardous Air Pollutants are controlled through regulations on individual sources of these pollutants.

Federal Regulations

As required by the Federal Clean Air Act, the EPA established federal AAQS for the original six criteria air pollutants identified in the Federal Clean Air Act: O₃, CO, nitrogen dioxide, sulfur

dioxide, suspended PM, and lead. Standards for these pollutants are listed in *Table 7-3*. These standards represent the levels of air quality, with an adequate margin of safety, necessary to protect the public health and welfare.

The Federal Clean Air Act requires the states to classify air basins (or portions thereof) as either "attainment" or "non-attainment" with respect to the criteria air pollutants, based on whether or not the federal AAQS have been achieved, and to prepare air quality plans containing emission reduction strategies for those areas designated as "non-attainment." Western Placer County is located in the Sacramento Valley Air Basin, which is in severe non-attainment for federal O₃ standards. If attainment is not demonstrated by 2005, substantial financial penalties and/or stricter air quality standards could be imposed on all jurisdictions within the Sacramento Valley Air Basin, including Placer County.

Until 1998, the Sacramento Valley Air Basin was classified as "non-attainment" with respect to the federal CO standards. Currently, the Sacramento Valley Air Basin is considered a federal planning area for CO standards. A federal planning area is a basin that was in non-attainment and needs to demonstrate compliance with the federal standards for two consecutive years and to develop a maintenance plan demonstrating that emission levels will remain in compliance for at least ten years in order to achieve attainment again (Air Resources Board 1998).

State Regulations

The State of California has established its own ambient standards for the criteria pollutants, which are presented with the federal AAQS in *Table 7-3*. These standards are referred to as state AAQS and are equal to or more stringent than their federal counterparts. State AAQS have also been established for certain pollutants not covered by the federal AAQS, such as hydrogen sulfide and vinyl chloride. As discussed above, the California Air Resources Board also designates attainment status for air basins and counties, or portions thereof. Placer County has been designated as non-attainment for state AAQS for O₃ and PM₁₀, and is unclassified for CO (meaning there is not enough data to classify the region attainment or non-attainment for this pollutant) (Air Resources Board 2003c). Placer County is in attainment for all other criteria air pollutants.

Sacramento Area Regional Ozone Attainment Plan

The Federal Clean Air Act requires non-attainment areas to develop air quality plans that contain strategies for achieving attainment. In response to the non-attainment designation of the Sacramento Valley Air Basin with respect to federal O_3 standards, the three Air Quality Management Districts and two Air Pollution Control Districts in the Sacramento region developed the *Sacramento Area Regional Ozone Attainment Plan*, also known as the 1994 State Implementation Plan (SIP). This document identifies a comprehensive regional strategy to reduce O_3 levels in the region. The SIP focuses on reducing emissions of ROC and NO_X , as these pollutants are the precursors to O_3 . To attain a one-ton-per-day reduction in ROC and NO_X emissions the SIP requires implementation of transportation control measures and land use control measures.

Table 7.3 Ambient Air Quality Standards

Pollutant (measurement)	Averaging	Stan	dard
Fonutant (measurement)	Time	State	Federal
Carbon monoxide (ppm)	8 hours	9	9
Carbon monoxide (ppm)	1 hour	20	35
Nitrogen dioxide (ppm)	Annual mean		0.053
Tritiogen dioxide (ppm)	1 hour	0.25	
Ozone (ppm)	1 hour	0.09	0.12
Ο2011C (pp111)	8 hours		0.08
Lead (μg/m³)	Quarterly		1.5
Lead (μg/III)	30 days	1.5	
Particulate matter less than 10	Annual mean	20 ^a	50
microns in diameter (μg/m³)	24 hours	50	150
Particulate matter less than 2.5	Annual mean	12 ^a	15
microns in diameter (μg/m³)	24 hours		65
	Annual mean		0.03
Sulfur dioxide (ppm)	24 hour	0.04	0.14
Guilai dioxide (ppili)	3 hour		0.50 ^b
	1 hour	0.25	

Notes:

-- no standard

ppm parts per million

μg/m3 micrograms per cubic meter

California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1-hour), nitrogen dioxide, suspended particulate matter (PM_{10}), and visibility reducing particles are values that are not to be exceeded. The sulfur dioxide (24-hour), sulfates, Lake Tahoe carbon monoxide, lead hydrogen sulfide and vinyl chloride standards are not to be equaled or exceeded. National standards, other than ozone and those based on annual averages or arithmetic means are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standard is equal to or less than one.

- a On June 20, 2002, the Air Resources Board approved staff's recommendation to revise the PM₁₀ annual average standard to 20 μg/m3 and to establish an annual average standard for PM_{2.5} of 12 μg/m3. These standards will take effect on final approval by the Office of Administrative Law, which is expected in May 2003. Information regarding these revisions can be found at http://www.arb.ca.gov/research/aaqs/std-rs/std-rs.htm.
- **b** This is a secondary standard.

Source: California Air Resources Board

Local Regulations

Placer County 1991 Air Quality Attainment Plan

The 1988 California Clean Air Act also requires non-attainment areas to develop air quality plans for achieving attainment. In accordance with this regulation, the Placer County APCD developed the 1991 Air Quality Attainment Plan, which discusses policy goals and guidelines for achieving air quality standards. This Plan focuses on reducing emissions of ROC and NO_X as a

way to combat the high O₃ concentrations in Placer County. Strategies to reach "attainment" levels of O₃ include stationary source controls, transportation control measures, indirect source control measures, and coordination with the Placer County Transportation Commission in development of the County Congestion Management Program.

Placer County General Plan

The *Placer County General Plan* Air Quality section of the Natural Resources Element provides guidance in land use and development policies for implementation by the Placer County APCD (PCAPCD). The goals of this section are to protect and improve air quality in Placer County, and to integrate air quality planning with the land use and transportation planning process. Policies adopted in support of these goals include minimizing stationary source and area source emissions through the use of mitigation measures, encouraging project proponents to consult with the County regarding the applicability of transportation control measures, considering energy efficiency during design review of new buildings, requiring project level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures, applying buffer standards to provide separation between possible emission/nuisance sources (such as industrial and commercial uses) and residential uses, and requiring new development to be planned to result in smooth flowing traffic conditions for major roadways.

Auburn/Bowman Community Plan

The *Auburn/Bowman Community Plan* air quality goals are to protect and improve air quality in the Auburn area, and to assure Placer County's compliance with state and federal air quality standards. Policies that support attainment of these goals and are relevant to the proposed Zoning Text Amendment include using indirect source control program strategies, applied through individual land use performance standards, for all new development within the plan area to reduce emissions; and requiring project-specific air quality analysis for new development that could generate 200 or more daily trip-ends.

Foresthill General Plan

The Foresthill General Plan contains no goals or policies regarding air quality relevant to the proposed Zoning Text Amendment.

Granite Bay Community Plan

The Conservation section of the Natural Resources Element of the *Granite Bay Community Plan* identifies the goal of protecting the high quality of air and water resources of the plan area consistent with adopted federal, state and local standards. Policies of this plan that support this goal include requiring that new development be designed with conservation of the natural landscape, including minimizing disturbance to natural terrain and vegetation, as an overriding consideration, and that replanting/planned landscaping be implemented when natural vegetation is removed; conducting review of proposed projects for their potential adverse affect on air and water quality, including requiring a "CALINE 4CO hotspot computer analysis" for all new projects and provide additional mitigation, if required by the air pollution control district; implementing erosion control measures and dust control measures for construction projects; and promoting energy conservation in new development.

Horseshoe Bar/Penryn Community Plan

This community plan establishes three goals related to air quality -- recognize clean air as an essential resource for maintaining a high quality of living, protect and improve air quality in the plan area, and integrate air quality planning with the land use and transportation planning process. Policies of the *Horseshoe Bar/Penryn Community Plan* that provide for attainment of these goals include considering the contribution of vegetation and water areas in maintaining the air quality, locating and designing new development to conserve air quality and minimize direct and indirect emission of air contaminants, submitting new development proposals to the Placer County Air Pollution Control District for review and identification of necessary mitigation measures, and requiring project-specific air quality analysis for new development projects that may generate 200 or more daily trip-ends.

Meadow Vista Community Plan

The air quality goal of the *Meadow Vista Community Plan* is to minimize air pollution in order to protect the public's health. This goal is supported by policies requiring the county to regulate the provision of woodstoves in new residential development and to institute a buy-back program for existing woodstoves; encouraging the use of lesser-polluting forms of heating such as pellet stoves, active and passive solar heat, natural gas, or heat pumps; discouraging open burning of leaves (except leaves still attached to branches); and encouraging reuse or alternative disposal of brush and wood, including use as firewood, chipping followed by the use as mulch, compost, or biomass. While these policies are typically applied to residential development, the policies related to burning of greenwaste are relevant to plant nursery operations.

Dry Creek West Placer Community Plan

The *Dry Creek West Placer Community Plan* identifies a goal of recognizing that clean air is an essential resource for maintaining a high quality of living. This goal is supported by policies that encourage maintenance of existing vegetation during construction of new development, require replacement of vegetation removed during construction with an emphasis on use of native, drought-tolerant plant materials, and require implementation of mitigation measures to control erosion and dust emissions during earth-moving activities.

7.3 PROJECT IMPACTS

Appendix G of the CEQA Guidelines provides the following criteria for determining the significance of the impact of project-generated air pollutant emissions on regional air quality. A project would be considered to have significant impacts if it:

- Conflicts with or obstructs implementation of the applicable air quality plan,
- Violates any air quality standard or contributes substantially to an existing or projected air quality violation,
- Results in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for O₃ precursors),
- Exposes sensitive receptors to substantial pollutant concentrations,

- Results in exposure of people to toxic air contaminants (i.e., diesel fuel, pesticides), or
- Creates objectionable odors affecting a substantial number of people.

Impacts Determined to be Less than Significant

Conflict With or Obstruct Implementation of Applicable Air Quality Plans. The proposed Zoning Text Amendment would change the requirements under which plant nurseries may develop in Placer County. While no specific development is proposed at this time, in total it is expected that approximately 156 acres of land would be developed as plant nurseries under the proposed Zoning Text Amendment, as discussed in CHAPTER 2 PROJECT DESCRIPTION. Construction of new plant nurseries would generate air pollutant emissions resulting from grading and operation of construction equipment. Many new plant nurseries would require issuance of a use permit prior to construction. The use permit approval process would include project-specific environmental review and provide for the implementation of mitigation measures as necessary. Additionally, all new nursery development will be subject to the requirements of the Placer County Grading Ordinance and the Land Development Manual, which include the use of Best Management Practices during construction to control all emissions. Both the Sacramento Area Regional Ozone Attainment Plan and the Placer County 1991 Air Quality Attainment Plan assume that land development in the region will continue. Therefore, the construction of new nurseries on ±56 acres is expected to result in less than significant impacts related to the implementation of the applicable air quality attainment plants.

Operation of plant nurseries generates pollutant emissions similar to existing allowed and permitted land uses. Plant Production Nurseries are primarily an agricultural operation, and generate pollutant emissions related to use of equipment, use of pesticides, and limited employee vehicle trips. Based on the California Air Resources Board 2003 Almanac Emission Projection Data (Air Resources Board 2003d), farming operations (i.e., tilling soil, planting, harvesting) in Placer County generate approximately 1.21 tons of PM per day, but generate no measurable emissions of ROC and NO_X, which are the pollutants of concern for the applicable air quality plans. Operation of farm equipment generates approximately 0.17 tons per day of ROC and 1.21 tons per day of NO_X. Operation of farm equipment is approximately ½ of one percent of the county-wide emissions of 27.59 tons per day of ROC, and approximately four percent of the county-wide emissions of 30.0 tons per day of NO_X. There are currently approximately 57,770 acres of farmland production within the county (NFA/ARS 2002), which means that each acre produces approximately 0.005 pounds of ROC and 0.4 pounds of NO_X per day. Therefore the projected addition of approximately 156 acres of new plant nurseries could generate approximately 0.9 pounds per day of ROC and 6.53 pounds per day of NO_X. These would be less than significant increases in ROC and NO_X and would not interfere with implementation of the applicable air quality plans.

Air pollution associated with Plant Production, Plus Nurseries and Plant Nurseries, Retail is expected to include additional vehicular emissions related to sales activities. Sales related traffic trips would include use of a variety of types of vehicles, from passenger cars to light and medium duty trucks. Mobile sources are the largest generator of both ROC and NO_X in Placer County. They account for approximately half of the ROC emissions and more than 80% of the NO_X emissions (Air Resources Board 2003d). However, as discussed in CHAPTER 6 TRANSPORTATION AND CIRCULATION, traffic increases as a result of the development of ±156 acres of new plant nurseries is not expected to be significant. Additionally, many new Plant

Nurseries, Retail and Plant Production, Plus Nurseries will require issuance of a use permit, thus allowing for project specific environmental review and implementation of mitigation measures. Therefore, the emissions of ROC and NO_X from traffic associated with new plant nurseries are expected to be less than significant in relation to the implementation of the applicable air quality plans.

Violate any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation. The Placer County APCD is responsible for compliance with State and federal air quality standards (*Table 7.3*). The Placer County APCD has established the New Source Review Rule that presents thresholds of pollutant emissions above which application of Best Available Control Technology is required on both new and modified emissions sources. These thresholds, listed in *Table 7.4*, serve as air quality standards by which new projects are evaluated.

Table 7.4
APCD Thresholds (pounds per day)

Air Contaminant	Thresholds for Implementation of Mitigation Measures	Significance Thresholds
Reactive organic compounds (ROC/TOC)	10	82
Nitrogen oxides (NO _X)	10	82
Sulfur oxides (SO _X)	10	136
Particulate matter less than 10 microns in diameter (PM_{10})	82	82
Carbon monoxide (CO)	550	550

Source: Placer County Air Pollution Control District

The proposed Zoning Text Amendment does not include development of any specific projects, but is expected to result in the future development of approximately 156 acres of new plant nurseries. Development of new Plant Nurseries, Retail and Plant Production, Plus Nurseries will require the issuance of a use permit in all zones except the C2, C3, HS, and IN zones, where these uses are permitted with zoning clearance. The use permit process will include evaluation of the project specific air pollutant emissions generated both during construction and during operation of the new nurseries. This will allow for the implementation of project specific mitigation measures for projects with emissions that exceed the threshold values. An air quality impact would be significant if a proposed project is anticipated to generate emissions in excess of the APCD Significance Thresholds. Emissions that exceed the thresholds will require implementation of mitigation measures.

Development of most Plant Production Nurseries will not be subject to project specific environmental review. Plant Production Nurseries would require a use permit in the RA and RF zones if the growing area for the nursery exceeds five acres. As above, this would allow for the implementation of project specific mitigation measures if necessary. However, Plant Production Nurseries are not expected to generate air pollutant emissions in excess of APCD standards. On average agricultural operations generate approximately 0.4 pounds of PM per acre but no measurable emissions of any other pollutant (Air Resources Board 2003d). This

represents a less than significant impact of the potential development under the proposed project.

Results in A Cumulatively Considerable Net Increase of any Criteria Pollutant for which the Project Region is Non-Attainment. Placer County air quality meets state and federal standards for most pollutants, but is designated non-attainment for O₃ and PM₁₀. As discussed above, operation of Plant Production Nurseries is expected to generate pollutant emissions similar to other farming-type activities, which currently occur on approximately 57,770 acres across the county. These generate 1.21 tons per day of PM. Throughout the county a total of 41.42 tons per day of PM are generated by all land uses and mobile sources (Air Resources Board 2003d). An increase of ±156 acres of plant nurseries is expected to generate an additional 6.53 pounds per day of PM. This is a less than significant contribution to the existing total PM emissions in the county.

Ozone is formed by chemical reactions between ROC and NO_X. The largest generators of ROC and NO_X emissions are vehicular sources. Cleaning processes and use of surface coatings in new construction also generate relatively substantial amounts of ROC. Operation of new Plant Nurseries, Retail and Plant Production, Plus Nurseries as allowed under the proposed Zoning Text Amendment is expected to result in minimal increases in regional traffic volumes, and therefore would result in less than significant increases in ROC and NO_X emissions and the associated O₃ concentrations. Additionally, many new Plant Nurseries, Retail, and Plant Production, Plus Nurseries will require issuance of a use permit, thus allowing for project specific environmental review and implementation of mitigation measures for individual projects that are expected to have significant traffic and air quality impacts.

Expose Sensitive Receptors to Substantial Pollutant Concentrations. Sensitive receptors are those land uses that house populations that are more highly sensitive to air pollution than some other populations. Typically, this is taken to include residential, medical, and educational land uses. While the proposed project includes no specific development, it is anticipated that would occur under the regulations of the the proposed Zoning Text Amendment by 2020. As discussed in Chapter 2 Project Description, it is anticipated that a substantial proportion of this new development will occur in the RA and F zone districts due to land suitability, proximity to the market for plant products, and proximity to transportation facilities. This could result in the development of plant nurseries adjacent to sensitive residential and educational development. Additionally, plant nursery development would be permitted in several commercial zones, which may include medical facilities.

The proposed project does not include any changes in the permissibility of Plant Nurseries, Retail. They would continue to require a use permit in all zones where they may locate except the C2, C3, HS, and IN zones. The same requirements would apply to Plant Production, Plus Nurseries. The C2, C3, HS, and IN zones do not contain a substantial number of sensitive receptors or land uses that would house sensitive receptors. Therefore development of plant nurseries in these zones without a use permit would result in less than significant impacts related to sensitive receptors. Development of other Plant Nurseries, Retail and Plant Production, Plus Nurseries would include project-specific mitigation measures as determined to be necessary based on the use permit and environmental review processes.

Plant Production Nurseries in the RA and RF zones with growing areas that exceed five acres would also require a use permit. These new plant nurseries would be required to implement project-specific mitigation measures through the use permit process. Plant Production Nurseries that could develop without a use permit in the RA, RF, C1, CPD, and OP zones may be located adjacent to sensitive receptors. However, Plant Production Nurseries are not expected to generate significant levels of air pollutants that would affect the potential receptors. As discussed above, Plant Production Nurseries would generate approximately 0.4 pounds per acre per day of PM₁₀, 0.005 pounds per acre per day of ROC, and 0.4 pounds per acre per day of NO_X. These are very low emission rates and would not be expected to result in health hazards for nearby receptors.

Create Objectionable Odors Affecting a Substantial Number of People. In general plant production and sales activities do not generate any objectionable odors. As an accessory use to the primary use of plant production and/or sales, many plant nurseries compost organic materials for reuse onsite. Composting of these materials is restricted to the green-waste generated onsite. No import of additional materials for composting is permitted. Such an action could only occur in a zone district where recycling processing and waste disposal facilities are permitted. Composting of green material does not generate the objectionable odors that are generated from composting of food wastes and other commonly composted materials.

Potentially Significant Impacts

Impact 7.1 Exposure of People to Toxic Air Contaminants

Significance Before Mitigation	Potentially Significant	
Mitigation Measures	7.1a and 7.1b	
Significance After Mitigation	Less than Significant	

While the proposed project does not include any specific nursery development, the development of approximately 156 acres of new nursery land uses is expected to occur under the regulations of the proposed Zoning Text Amendment. Plant nurseries use a variety of toxic substances in their operation, including pesticides and equipment fuel. Exposure of workers onsite and residents and workers of neighboring land uses to airborne toxic chemicals could result from emissions of diesel fuel equipment and from application of pesticides.

The California Air Resources Board regulates toxic air contaminants (TAC) through the Toxic Air Contaminant Identification and Control Act (AB 1807) and Air Toxics "Hot Spots" Information and Assessment Act (AB 2588). Under AB 1807, the Air Resources Board follows a two-step process for identifying and managing health risks associated with airborne toxics (Air Resources Board 2002b). The Air Resources Board first determines if a substance should be formally identified as a toxic air contaminant, based on the potential for human exposure to a substance and the health effects of the substance. The second step is for the Air Resources Board to determine if regulatory action is necessary to reduce the risks of a particular TAC. This is accomplished by reviewing the emission sources of a TAC, reviewing existing regulatory controls, and reviewing current best available technologies that could control a particular TAC. The Board may establish new requirements to control an identified TAC. Under AB 2588, the Air Resources Board requires businesses to report their air toxics emissions, ascertain health risks, and notify nearby residents of significant risks. They may also require that a business that

poses a significant health risk to the community reduce their risk through development and implementation of a risk management plan.

PM emitted from diesel fuel engines was identified as a TAC by the California Air Resources Board in 1998. The Air Resources Board then developed risk reduction and risk management plans to control these emissions. Subsequently, the Air Resources Board has developed a number of programs to control diesel emissions, including providing incentives for diesel fuel equipment owners to replace existing engines with cleaner-burning ones and establishing exhaust emission standards. Compliance with these requirements will mitigate the potential impact to a less than significant level.

Pesticide use is heavily regulated through the U.S. Environmental Protection Agency, State Department of Pesticide Regulation, and Placer County Environmental Health Department (PCEHD). The PCEHD, a division of the Department of Health Services, is responsible for implementing regulations regarding the use and disposal of hazardous materials as the Certified Unified Program Agency (CUPA) (defined in California Health and Safety Code, Division 20, Chapter 6.11 and further discussed in CHAPTER 12 HAZARDS AND HAZARDOUS MATERIALS of this EIR) for the county. Mitigation measures to ensure that pesticide use at a new plant nursery does not result in substantial exposure of people to toxic air contaminants require compliance with all applicable local, state, and federal regulations.

7.4 MITIGATION MEASURES

Exposure of People to Toxic Air Contaminants

Mitigation Measure 7.1a: All diesel powered equipment and trucks used onsite at any plant nursery and all diesel powered trucks used for materials deliveries shall comply with the exhaust emissions standards for such equipment established by the California Air Resources Board as part of the Off-Road Mobile Sources Emission Reduction Program and the Heavy-Duty Diesel In-Use Strategies Program.

Mitigation Measure 7.1b: Each plant nursery shall remain in compliance at all times with the licensing, training requirements, and applicable regulations administered by the Placer County Agricultural and Weights and Measures Department and the State of California, and Best Management Practices pertinent to transportation, handling, storage, and application of pesticides, herbicides, and fertilizers. Herbicides, fungicides, and pesticides may only be applied at a nursery site by licensed applicator in accordance with product labeling directions. Storage of chemicals onsite is contingent upon approval by the Placer County Department of Environmental Health and applicable fire district regulations.

CHAPTER 8

Noise

CHAPTER 8 NOISE

8.1 SETTING

Noise can be generally classified as either ambient (general background) or source specific. The ambient noise in a given community is influenced by several factors, including the proximity and volume of vehicular traffic and land use types and intensity. Source specific noises include operation of equipment and machinery and construction activities. Residential areas typically experience noises of children playing, landscape maintenance activities, and traffic. Rural residential areas experience lower traffic noises, and due to larger parcel sizes tend to be exposed to lower volumes of noise from adjacent residential noises. Predominant noises sources in very rural areas consist of natural noises such as birds and wind. In agricultural areas, noises include natural sources as well as noises associated with trucks, heavy equipment (i.e., tractors), and agricultural processing activities (i.e., harvesting and packaging for shipment). Commercial areas typically experience greater noise exposure due to traffic, including truck traffic, and less exposure due to other noise sources (children playing, landscape maintenance). Where land use types mix or are adjacent to each other, noise conflicts can occur.

Noise sources associated with plant nurseries typically include passenger vehicles (employees and customers), delivery trucks, light-duty equipment (rototillers), medium and heavy equipment (i.e., tractors), and material processing and packaging operations. Equipment use and processing and packaging operations occur on a seasonal or periodic basis and therefore do not generate noise on a daily basis. Most plant nurseries do not generate significant noise levels. Nurseries that operate 24 hours per day are more likely to cause noise conflicts with neighboring residential land uses because of the heightened sensitivity to noise exposure during the night.

Fundamentals of Acoustics

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that interferes with normal human activities. Noise moves from the source of the noise to the receptor in sound waves. As sound waves reach the human ear they are interpreted primarily based on two characteristics: pitch and loudness. Pitch refers to the tone of the sound and is determined by the frequency, or number of cycles per second, of the sound wave. Loudness is the intensity or volume of the sound and is measured by the amplitude of the sound wave. Sound intensity refers to the strength at which the sound wave strikes the receiving object (i.e., the ear).

Most sounds that occur within our environment do not cause physical injury to the human ear. The principal human response to environmental noise is psychological, although a sound that registers high in intensity can damage the human ear. Varying pitches of sound usually cannot cause injury, but certain pitches can cause strong psychological reactions (i.e., annoyance). The response of an individual to a particular noise is influenced by the type of noise, the perceived importance of the noise, its appropriateness in the setting, the time of day, the type of activity during which the noise occurs, and the sensitivity of the individual.

Loudness

Sound intensity is measured in decibels (dB), which are represented by a logarithmic scale. Unlike linear units, such as feet and pounds, moving from one value to the next on the logarithmic scale represents a sharp increase in intensity. For example, 10 dBs are 10 times more intense than 1 dB, 20 dBs are 100 times more intense, and 30 dBs are 1,000 times more intense. This system of measurement gives an approximate connection between the physical intensity of sound and the perceived loudness of that sound to the human ear. A doubling of the intensity of a sound increases the sound level by 3 dB, regardless of the initial sound level. For example:

$$60 \text{ dB} + 60 \text{ dB} = 63 \text{ dB}, \text{ and}$$

 $80 \text{ dB} + 80 \text{ dB} = 83 \text{ dB}$

The measured dBs decrease as distance from the source of the sound increases; the amount of decrease depends on the type of source (stationary vs. a "line source" such as highway traffic) and the condition of the surrounding land (i.e., paved ground, soft ground, the presence and type of vegetation). Sound levels of typical noise sources and environments are provided in *Table 8.1* as a frame of reference.

Table 8.1
Common Sound Levels and Their Noise Sources

Noise Source	A-Weighted Sound Level Noise Environment in Decibels		Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle at a few feet away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Moderately Loud	
Pneumatic Drill; Vacuum Cleaner	80	Moderately Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	
Near Freeway Auto Traffic	70	Moderately Loud	
Average Office	60	Quiet	½ times as loud
Suburban Street	55	Quiet	
Light Traffic; Soft Radio Music in Apartment	50	Quiet	1/4 times as loud
Large Transformer	45	Quiet	
Average Residence Without Stereo Playing	40	Faint	1/8 times as loud
Soft Whisper	30	Faint	
Rustling Leaves	20	Very Faint	

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Human Breathing	10	Very Faint	Threshold of Hearing
	0	Very Faint	

Source: Handbook of Acoustical Measurements and Noise Control, 1991.

Methods for Measuring Noise

Most sounds heard in the environment consist of a broad band of frequencies. Human hearing is less sensitive to low and high frequencies than the mid-range. While a human ear can typically detect frequencies in the range of 20 Hertz (Hz) to 20 kHz, the ear is most sensitive in the range between 500 and 4,000 Hz (Iverson 2002). Therefore, the method most commonly used to quantify environmental sounds evaluates all frequencies present in a sound and assigns different weights to frequencies based on the sensitivity of human hearing to each. This is called "A" weighting, and the measured decibel level is called the A-weighted sound level (dBA).

Although the A-weighted sound level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Applying additional weighting to the A-weighted sound levels generates a descriptor called the equivalent sound level (L_{eq}). This descriptor is used to indicate the average sound exposure over a given time period (www.webref.org 2002). The additional weighting accounts for factors, such as time of day, that influence an individual's sensitivity to noise.

Another sound measure known as the Day-Night Average Noise Level (L_{dn}) is defined as the A-weighted average sound level for a 24-hour period. It is calculated by adding a 10 dBA penalty to sound levels in the night (10:00 p.m. to 7:00 a.m.) to compensate for the increased sensitivity to noise during the quieter evening and nighttime hours (Iverson 2002). The L_{dn} is used by agencies such as the U.S. Department of Housing and Urban Development (HUD), the State of California, the City of Auburn, and Placer County to define acceptable land use compatibility with respect to noise. *Table 8.2* provides definitions of terms associated with measuring noise and determining potentially significant noise impacts.

Table 8.2
Definitions of Acoustical Terms

Term	Definition
Decibel, dB	A unit of level that denotes the ratio between two quantities that are proportional to power; the number of decibels is ten times the logarithm (to the base ten) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., number of cycles per second), measured in Hertz (Hz).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de- emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.

Term	Definition
Equivalent Continuous Noise Level, Leq	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of five decibels to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of ten decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Noise Level, Ldn	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of ten decibels to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Lmax, Lmin	The maximum and minimum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources at may directions, near and far; no particular sound is dominant.
Intrusive	A noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Handbook of Acoustical Measurements and Noise Control, 1991.

Psychological and Physiological Effects of Noise

A sound level of 0 dB is approximately the threshold of human hearing and is barely audible under extremely quiet conditions. Normal speech has a sound level of approximately 60 dB. Physical damage to human ears begins at prolonged exposure to noise levels higher than 85 dB. Exposure to high noise levels affects our entire system, with prolonged noise exposure in excess of 75 dB increasing body tensions, and thereby affecting blood pressure, functions of the heart, and the nervous system. Extended periods of exposure to 90 dB or above would result in permanent cell damage. When the noise level reaches 120 dB, a tickling sensation occurs in the human ear even with short-term exposure. This level of noise is called the threshold of feeling, as shown in *Table 8.1*. As the sound reaches 140 dB, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 190 dB would rupture the eardrum and permanently damage the inner ear.

Noise Impacts

There are three classifications of noise impacts used when evaluating project-specific noise impacts . The first is an increase in noise level that is noticeable to humans. These <u>audible</u> impacts generally refer to a change of 3.0 dBs or greater. This amount of change has been found to be barely perceptible in exterior environments. The second classification, <u>potentially audible</u>, refers to noise level changes between 1.0 and 3.0 dB. This range of noise levels has been found to be noticeable only in laboratory settings. <u>Inaudible</u> changes are those that are less than 1.0 dB. These slight changes are not noticeable to the human ear. Only audible impacts in existing noise levels are considered potentially significant impacts.

Some land use types are considered to be noise-sensitive; meaning that exposure to excessive noise levels can interfere with or limit the viable use of the land. Residential dwellings; hotels and motels; educational, medical, and institutional facilities (e.g., schools, hospitals, nursing

homes, libraries); and office-professional land uses are noise-sensitive receptors. New projects which result in noise-sensitive receptors being exposed to noise levels in excess of defined standards are also considered potentially significant impacts.

8.2 REGULATORY FRAMEWORK

Environmental noise is regulated in Placer County through the *Placer County General Plan* and numerous Community Plans. The Placer County Planning Department is currently in the process of drafting a proposed county noise ordinance based on direction given by the Placer County Board of Supervisors. Upon the adoption of a noise ordinance, future development would be subject to the requirements of that ordinance.

The *Placer County Zoning Ordinance* does not specifically address noise levels or impacts of new development on adjacent land uses. However, some provisions of the Zoning Ordinance, such as setback requirements and landscaping/fencing requirements, will serve to ensure that noise impacts between land uses are minimized.

Placer County General Plan

The Noise Element of the *Placer County General Plan* expresses the goal of protecting County residents from "the harmful and annoying effects of exposure to excessive noise" (Goal 9.A). To accomplish this goal, the Noise Element establishes land use compatibility criteria for ambient noise levels (excluding transportation noise sources) of 50 dB for exterior noise levels at residential property lines and 45 dB for interior noise levels (Table 9-1, Placer County General Plan). Commercial and office-professional land uses require that non-transportation noise levels remain below 75 dB at the property lines. The General Plan standards for transportation-related noise are 60 dB for exterior noise levels in residential areas and 45 dB for interior noise levels for residential, institutional, and office-professional land uses (Table 9-3, Placer County General Plan). Policy 9.A.10 identifies noise impact mitigation measures to include the use of building setbacks, building orientation, and noise barriers. Policy 9.A.12 requires that noise impact mitigation shall rely primarily on site and building design, with the use of noise barriers only considered "after all other practical design-related noise mitigation measures have been integrated into the project." Noise barriers can consist of vegetated berms, fences, and walls.

Community Plans

Several community plan areas would be affected by the proposed Zoning Text Amendment. The following community plans contain noise elements:

Granite Bay Community Plan

The *Granite Bay Community Plan* expresses the goal of creating a "livable environment free from excessive noise" for its residents. Plan policies in support of this goal include minimizing the adjacency of noise-generating and noise-sensitive land uses, requiring noise abatement for new projects as necessary, and limiting construction activities to 7 a.m. to 7 p.m., Monday through Friday. No weekend construction is permitted within the *Granite Bay Community Plan* area. Table 5 of this Community Plan establishes 50 dBA as the maximum allowable noise level at the property line of residential land uses.

Horseshoe Bar/Penryn Community Plan

Section D of the Community Development Element addresses the noise environment of the *Horseshoe Bar/Penryn Community Plan* area. Goals of this section are to protect plan area residents from excessive noise, preserve the "rural noise environment" of the area and to protect plan area noise-generating businesses from encroachment by noise-sensitive uses. Most policies in this section relate to the development of new noise-sensitive land uses and to transportation related noise sources. One policy applicable to the development of new plant nurseries recommends that vegetated earthen berms be used in place of masonry sound walls where noise attenuation is necessary. Table 8 of this Community Plan establishes 50 dBA as the maximum allowable noise level at the property line of residential land uses.

Meadow Vista Community Plan

The *Meadow Vista Community Plan* does not contain a separate noise element. Instead this community plan adopts the provisions of the Placer County General Plan noise element. Those provisions are discussed above.

Auburn/Bowman Community Plan

Section F of the *Auburn/Bowman Community Plan* establishes goals and policies for the Auburn/Bowman area with respect to the future noise environment of the community. This section describes noise as "unwanted sound" that can "inhibit general well being" and contribute to "undue stress and annoyance." As in the *Horseshoe Bar/Penryn Community Plan*, the identified goals for this section include protecting Community Plan area residents from excessive noise, preserving the "rural noise environment" of the area and protecting plan area noise-generating businesses from encroachment by noise-sensitive uses. Table 14 of the *Auburn/Bowman Community Plan* establishes 70 dB as the maximum allowable noise level, with a maximum hourly L_{eq} of 50 dB, for daytime noises. Nighttime standards are 65 dB and 45 dB for the hourly L_{eq}. The plan also states that in rural areas, residents expect lower ambient noise levels than in urban areas. Increases in vehicular noises in rural areas can cause significant impacts to residents. To ensure attainment of the stated goals, requirements for completing acoustical analysis and incorporating appropriate mitigation measures for potential noise conflicts are tied to the design review and building permit processes in the Community Plan implementation measures.

8.3 PROJECT IMPACTS

Significance Criteria

Potential impacts associated with noise have been evaluated using the following criteria applicable to a program level EIR, as identified in Appendix G of the CEQA Guidelines:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies,
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels,
- For a project located within an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project to excessive noise levels, or

For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

Impacts Determined to be Less than Significant

Exposure of Persons to or Generation of Noise Levels in Excess of Standards. While Placer County is in the process of developing a noise ordinance, the noise level standards established in the General Plan provide the basis for evaluating impacts related to potential plant nursery operations. All future development will be required to comply with the provisions of the new noise ordinance upon its adoption. Potential increases in ambient noise levels associated with plant nurseries developed under the proposed Zoning Text Amendment consist of periodic noises associated with seasonal harvesting of nursery crops and delivery trucks, and permanent noise sources such as operation of regularly used machinery, nursery stock maintenance, and sales activities. Overall, only 156 acres of land are expected to be developed as plant nurseries in the next eighteen years under the proposed Zoning Text Amendment.

Operation of Plant Production Nurseries within agricultural, commercial, and industrial zones and operation of Plant Nurseries, Retail and Plant Production, Plus Nurseries in the C2, C3, HS, and IN zones as allowed land uses would have less than significant impacts on ambient noise levels because noises associated with plant nurseries are similar to noises generated by land uses currently allowed within these zones. Operation of Plant Nurseries, Retail and Plant Production, Plus Nurseries will require issuance of a use permit in other zones where they may be located. Plant Production, Plus Nurseries could be located in the RA and RF zones only upon issuance of a Minor Use Permit. These permit requirements will allow for project-specific review of each nursery and the implementation of mitigation measures as required to prevent exposure of adjacent land uses to excessive noise levels.

Operation of Plant Production Nurseries within the RA and RF zones could expose residential land uses to occasional increases in ambient noise levels. Plant Production Nurseries in the RA and RF zones with greater than five acres growing area would be required to obtain a Minor Use Permit, which would allow for implementation of project-specific mitigation measures. Operation of a Plant Production Nursery with less than 5 acres of growing area within the RA and RF zones would be expected to generate noise similar to other crop production uses. As described above, examples would include passenger vehicles (employees and customers), delivery trucks, light-duty equipment (rototillers), medium and heavy equipment (i.e., tractors), and material processing and packaging operations. Equipment use and processing and packaging operations occur on a seasonal or periodic basis and therefore do not generate noise on a daily basis. As crop production is currently a permitted use in the RA and RF zone districts, implementation of the Zoning Text Amendment is not expected to result in a significant change in operational noise impacts in these zone districts.

Exposure of Persons to or Generation of Excessive Ground-Borne Vibration or Ground-Borne Noise Levels. Ground-borne vibration and noise levels are typically generated from large-scale construction (i.e., multiple story buildings requiring substantial building foundations) and mineral extraction projects. The proposed Zoning Text Amendment will have no affect on the siting or operation of mineral extraction facilities. The possible building construction associated with the future development of plant nurseries permitted under the proposed Zoning Text Amendment would not require large-scale construction. Typical buildings associated with

plant nurseries include greenhouses, storage sheds, processing and packing facilities, and administration offices. Development of new plant nurseries is projected to occur only on approximately 156 acres within Placer County by 2020. During construction of future plant nurseries, some existing adjacent land uses may be exposed to isolated and minor ground-borne vibration or noise, but due to the limited scope of these potential noise sources, this impact will remain less than significant.

Exposure of Persons Residing or Working in the Project Area to Excessive Noise Levels Associated with a Public Airport, Public Use Airport, or a Private Airstrip. Portions of the zone districts affected by the proposed Zoning Text Amendment to the Placer County Zoning Ordinance are located in the vicinity of public and private airports/airstrips. The proposed Zoning Text Amendment will have no impact on the use of the airports/airstrips, nor will they have any impact on the exposure of existing or future residents to airport/airstrip noise levels. The potential future development of plant nurseries could include development within areas influenced by a public or private airstrip, which could expose workers at the future plant nurseries to excessive noise levels. The Placer County Airport Land Use Compatibility Plan (Shutt Moen Associates 2000) indicates that cropland types of agricultural land uses are considered "clearly acceptable" land uses in areas with noise levels up to 70 dB, and "normally acceptable" in areas with noise levels up to 75dB.

With respect to the density of employees across a project site, Plant Production Nurseries are similar to crop production land uses. The proposed Zoning Text Amendment would allow Plant Production Nurseries to be located in areas where crop production is currently permitted, thus resulting in a less than significant change in numbers of workers in airport influenced areas. The proposed Zoning Text Amendment would make no change in the permissibility of Plant Nurseries, Retail which are allowed or permitted in commercial and industrial zones. Other than in the C2, C3, HS, and IN zones, Plant Production, Plus Nurseries will require a use permit, which will allow for implementation of mitigation measures if necessary. Therefore the proposed project would result in no significant change in the numbers of plant nursery employees exposed to excessive airport/airstrip noises.

Impact 8.1: Substantial Temporary Increases in Ambient Noise Levels in the RA and RF Zone Districts

Significance Before Mitigation:	Potentially Significant	
Mitigation Measures:	8.1a	
Significance After Mitigation:	Less than Significant	

Construction generated noise is a common concern with all land development. The proposed Zoning Text Amendment would not change the permissibility of Plant Nurseries, Retail, and therefore would have no change in impacts of new retail plant nursery construction. The proposed project would require that Plant Production, Plus Nurseries meet the same permit requirements for Plant Nursery, Retail, or obtain a Minor Use Permit in zones where Plant Production Nurseries are allowed. Therefore, except in the C2, C3, HS, and IN zones, non-Production Plant Nurseries would require issuance of a use permit, which would allow for study of site-specific noise impacts and implementation of mitigation measures as necessary. In the zones where a use permit is not required for Plant Nurseries, Retail and Plant Production, Plus Nurseries ambient noise levels are typically high, as they are influenced by substantial

noise from traffic, machinery, and manufacturing processes. Land uses in these districts are not noise-sensitive and implementation of the proposed project is expected to result in less than significant impacts related to construction of future plant nurseries in these zones.

Plant Production Nurseries would be allowed to locate in any zone that currently permits crop production. These zones include commercial, industrial, and agricultural zones, as well as two residential zones -- RA and RF. Construction of Plant Production Nurseries in the commercial, industrial, and agricultural zones is expected to result in less than significant impacts as the land uses in these zones are not noise-sensitive and the construction-generated noises will not exceed typically occurring noise levels permissible in these zones per General Plan standards. However, the construction of Plant Production Nurseries in the RA and RF zones could expose residential land uses to substantial temporary increases in ambient noise levels. Construction of Plant Production Nurseries with more than five acres of growing area would require issuance of a Minor Use Permit, allowing for implementation of mitigation measures. Therefore, potentially significant construction noise impacts of the proposed project are limited to development of Plant Production Nurseries with less than five acres of growing area within the RA and RF zones.

While the Noise Element of the *Placer County General Plan* does not specifically address construction noise level limits, the County has typically regulated construction-generated noise by limiting days and hours of construction through conditions of permit approval. In the *Granite Bay Community Plan* area, construction hours are limited to 7 a.m. to 7 p.m. Monday through Friday.

The Placer County Zoning Ordinance currently allows construction of new crop production, single-family dwellings, roadside stands for agricultural products, and accessory storage facilities within the RA and RF zones. Construction generated noise levels associated with construction of these types of land uses will be similar to plant production nursery construction generated noises. Plant Production Nurseries typically require facilities such as buildings for greenhouses; processing; storage, growing space, and materials office/administration facilities. Construction of these buildings and greenhouses is expected to be similar to construction of other currently permitted rural residential land uses and would not result in significant temporary increases in ambient noise levels. Noise impacts from construction activities such as grading and clearing related to plant nursery development could temporarily exceed those typical of other rural residential land uses both in duration and level. This is considered a potentially significant impact.

8.4 MITIGATION MEASURES

Substantial Temporary Increases in Ambient Noise Levels in the RA and RF Zone Districts

Mitigation Measure 8.1a: Site grading and clearing activities for development of plant nurseries in the RA and RF zone districts will require the issuance of Grading Permits. Article 15.48.240 of the Placer County Code specifies the conditions under which grading permits may be issued. The Director of Public Works is directed to impose conditions to protect the health, safety and welfare of the public in the issuance of grading permits. Subsection C.4 of this Article includes "requirements for dust, erosion, sediment and noise control, and hours of operation …".

Compliance with these provisions will result in less than significant impacts related to substantial temporary noise from site disturbance activities.

CHAPTER 9

BIOLOGICAL RESOURCES

CHAPTER 9 BIOLOGICAL RESOURCES

9.1 SETTING

Placer County supports a wide variety of biological resources and vegetative communities. As discussed in Chapter 5 Aesthetics, for characterization and evaluation purposes, the county has been divided into three areas based on topography and geography. Western Placer County is a part of the Sacramento Valley and is characterized by flat to gently rolling topography. Central Placer County represents the transition zone from Sacramento Valley to the Sierra Nevada Mountains. This foothill zone contains a wide variety of topography, vegetation, and water influences. Eastern Placer County comprises a portion of west face of the Sierra Nevada Mountains. Topography in this area is steep, and vegetative communities are more uniform than in western or central areas of the county. Wetlands and other water resources are distributed throughout the county.

In order to evaluate the potential impacts of plant nurseries on biological resources throughout Placer County, this chapter describes the major categories of biological resources present in each area of the county and documents the types of impacts that could be caused by the development of plant nurseries in proximity to those resources. As discussed in Chapter 2 Project Description, for purposes of evaluation, this EIR assumes that the majority of new nursery development under the proposed Zoning Text Amendment would occur in western and central Placer County on land zoned RA and F.

Habitat Types

In the practice of evaluating impacts to biological resources and managing open space and wild lands to provide the greatest wildlife value possible, it is useful to define a habitat classification system to provide a constant language with which to discuss the resource protection and management options. One such system used in California is the California Wildlife-Habitat Relationships System. The habitat naming conventions used by this system are documented in the book *A Guide to Wildlife Habitats of California*, which was prepared through the collaboration of numerous state regulatory agencies, private businesses, and biologists. This guide was first published in 1988 and is still used today as a primary authority on habitat types throughout the state.

Many factors are considered in assigning a habitat type designation to a particular project site or landscape. The *Guide to Wildlife Habitats* groups habitat types based on the predominant vegetation in a habitat. This results in the following classifications: Aquatic, Tree-Dominated, Shrub-Dominated, Herbaceous-Dominated, and Developed Habitats. Herbaceous plants are non-woody vegetation that typically grow in sunny or partly sunny conditions. Grasses, wildflowers, and other broad-leafed plants are examples of herbaceous species. The discussions presented in this section provide a generalized characterization of each habitat type. In practice, categorization of a project site into habitat types will be based on the particular features of the site, including topography, soil types, occurrence of water, types and amounts of flora and fauna, and occurrence of any special status, rare, or unique soils, plants, or animals.

Aquatic Habitats

The U.S. Environmental Protection Agency (EPA) defines wetlands as "areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season" (EPA 2003). In addition to providing important habitat for flora and fauna, wetlands provide many important benefits to people and the environment. They help regulate water levels within watersheds, improve water quality, reduce flood and storm damages, and support recreational activities.

Six major categories of aquatic habitats found in Placer County are discussed below. Some, such as rivers and streams, are found throughout the county, while some, such as vernal pools, occur only in a portion of the county. Other wetland types include swales, drainage ditches, and detention ponds. These types of wetlands are generally the result of human manipulation of ground conditions. Frequently, drainage ditches dug in association with a prior land development project will become naturalized wetlands due to a lack of proper maintenance. These wetlands are common throughout Placer County but do not represent a significant biological resource.

Regulation of impacts to many water resources is the responsibility of the U.S. Army Corps of Engineers. The Corps is granted this authority through the U.S. Clean Water Act, which is discussed in Section 9.2 of this EIR. "Waters of the U.S." for which the Corps is responsible include all navigable waters (lakes, rivers, and some large streams), any adjacent wetlands, and wetlands connected to a larger system. To control, quantify, and catalog impacts to water resources, the Corps relies on a permitting program, which is also discussed in Section 9.2 of this EIR.

Open Water

The U.S. Army Corps of Engineers defines open water as "an area that, during a year with normal patterns of precipitation, has standing or flowing water for sufficient duration to establish an ordinary high water mark." The Corps considers this term to include vegetated shallows, lakes, ponds, and portions of rivers and streams. Another definition for open water includes the requirement that water depth exceed two meters (roughly six feet) and/or extend beyond the depth of floating rooted plants (Mayer and Laudenslayer 1988). Examples of open water in Placer County range from large lakes and reservoirs -- Folsom Lake, French Meadows, Hell Hole - to small ponds and pools along county waterways. Most open water habitats are permanent, although water levels vary. Open water communities provide habitat for a wide variety of flora and fauna.

Rivers and Streams

Major rivers present within or along the boundaries of Placer County include the American River, Truckee River, Rubicon River, and Bear River. Streams and small rivers may be perennial, intermittent, or ephemeral. Perennial waterways are those with year-round water flow, and they are typically fed by groundwater and runoff from rainfall and irrigation. Intermittent waterways are fed both by groundwater and runoff from rainfall but have flowing water only at certain times of the year. An ephemeral streambed is typically above the watertable and is not fed by groundwater. Ephemeral streams are fed primarily by runoff from rainfall, and therefore usually carry water only following a rain event.

Rivers and streams provide habitat for a wide variety of animal species. Raptors frequently hunt over the open water in a river channel, while near-shore areas provide foraging habitat for waterfowl and shorebirds. Many insectivorous birds also forage over the water. Many species of fish, mammals, amphibians, and reptiles may be found on, in, or around rivers and streams. These habitats occur throughout all of Placer County.

Riparian Wetlands

Riparian wetlands are a type of emergent wetland that occur at the edge of rivers and streams and are characterized by the presence of "erect, rooted herbaceous hydrophytes" (Mayer and Laudenslayer 1988). (Hydrophytes are plants that typically grow in the water.) These wetlands may be permanent or may occur seasonally as water levels in rivers and streams fluctuate. Riparian wetlands collect water runoff and overflows during storm events, moderating seasonal flooding in other areas along a river or stream. Riparian wetlands are frequently flooded, and plant roots are adapted to the anaerobic conditions that occur during flooding. Riparian wetlands occur throughout all of Placer County.

Riparian wetlands provide habitat for many of the same species that use river and stream habitats. Most raptors are more likely to forage over open water but many also forage over riparian wetlands. The shallow and slow moving water of riparian wetlands create ideal habitat for many insects, so insectivorous birds find riparian wetlands to be essential foraging grounds.

Vernal Pools

Vernal pools are seasonally flooded depressions found in areas with an impermeable soil layer such as a hardpan, claypan, or volcanic basalt. Because of the impermeable layer, vernal pools retain standing water much longer then the surrounding uplands, however the pools dry up each season, usually from a combination of evaporation and infiltration. Vernal pools primarily occur in western Placer County, with the majority of them occurring in and near the Sunset Industrial Area, west of the City of Rocklin.

Vernal pools often fill and empty several times during the rainy season. Therefore, vernal pools support plants and animals that have adapted to this cycle of wetting and drying, including species of freshwater invertebrates, crustaceans, amphibians, insects, and many flowering plants, some of which sprout underwater and have developed special floating leaves and air-filled stems to stay afloat.

Vernal pool habitat throughout California has been heavily impacted by development, and a small percentage of the original vernal pool habitat areas remain intact. Because the plants and animals that live in vernal pools are highly specialized to the conditions present in this habitat, the reduction of this wetland type has resulted in reductions in the numbers of the flora and fauna species living here. Animals such as the vernal pool fairy shrimp (*Branchinecta lynchi*) and vernal pool tadpole shrimp (*Lepidurus packardi*) have been listed by the federal government as threatened or endangered, and plants such as Red Bluff dwarf rush (*Juncus leiospermus var. leiospermus*) and legenere (*Legenere limosa*) have been listed by the California Native Plant Society as rare, threatened, or endangered.

Seasonal Wetlands

Seasonal wetlands are another type of emergent wetland. These occur in various depressions in landscapes throughout Placer County. In contrast to riparian wetlands, seasonal wetlands are associated with rivers and streams but do not occur adjacent to waterways. Typically seasonal wetlands will occur within a river's floodplain, in landscape depressions where the groundwater intercepts the soil surface, or in depressions where precipitation volumes are sufficient to saturate the soil (EPA 2003). The major characteristic of seasonal wetlands is that they are dry for one or more seasons in each year. Soil types supporting seasonal wetlands tend to have moderate infiltration rates, which means that water is absorbed into the soil at a faster rate than in vernal pool wetlands, although slow enough to leave the soil saturated for a long enough period to allow wetland vegetation to establish.

Marshes

Marshes, which are sometimes referred to as a "wet meadow" habitat, occur where water is at or near the surface during most of the growing season. Plants usually found in marshes include species from the genera *Agrostis*, *Carex*, *Danthonia*, *Juncus*, *Salix*, and *Scirpus* (Mayer and Laudenslayer 1988). Trees and shrubs are not typically found in marshes but may occur on the fringes of these habitat areas. Marshes typically provide foraging habitat for mammals such as mule deer and elk, foraging and nesting habitat for bird species, and habitat for reptile and amphibian species. Marshes occur throughout all of Placer County. Alpine meadows are a type of marsh that occur in flat areas found in the higher elevations of the Sierra Nevada Mountains.

Tree-Dominated Habitats

Habitats classified as tree-dominated typically have a minimum of 10% canopy closure. Several categories of tree-dominated habitats are described in the *Guide to Wildlife Habitats of California*; of which 17 occur in substantial portions of Placer County and two occur in limited areas of the county.

Tree-dominated habitats that occur in western Placer County include blue oak woodland, valley oak woodland, and valley foothill riparian (the range for this habitat also reaches into central Placer County). In general, these habitats consist of a variety of oak trees, some associated shrubs (poison oak, coffeeberry, buckbrush, and manzanita), and annual grasses and other herbaceous plants as a groundcover layer. The oak woodland habitats tend to be interspersed with grasslands. Canopy closure in woodlands can vary widely, with closure typically high in valley soils along natural drainages and thinning as elevation increases and soil fertility decreases.

According to the *Horseshoe Bar/Penryn Community Plan*, "oak woodlands and savannas provide some of the highest-quality habitat for common and special-status wildlife species in California. Many of the oak trees that compose this community are 100-300 years old" (Placer County, 1994). Blue oak woodland is a habitat with limited distribution throughout California and occurs in some portions of the Granite Bay and Horseshoe Bar communities. Valley oak, and valley foothill riparian are more commonly distributed throughout the state and occur throughout western Placer County.

Tree-dominated habitats that occur in central Placer County are ponderosa pine, closed-cone pine-cypress, montane hardwood, montane hardwood-conifer, montane riparian (the ranges for the three montane habitats also reach into eastern Placer County), and blue oak-foothill pine.

Due to the topography, climate, and soils, a great variety of tree species grow in eastern Placer County. Tree-dominated habitats occurring in this area of the county include subalpine conifer, red fir, lodgepole pine, Sierran mixed conifer, white fir, Jeffrey pine, eastside pine, juniper, aspen, montane hardwood, montane hardwood-conifer, and montane riparian (these last three habitats also occur in central Placer County).

Shrub-Dominated Habitats

Habitats categorized as shrub-dominated have a minimum of 10% shrub canopy closure and a maximum of 10% tree crown closure. The montane chaparral habitat occurs across all of Placer County, and is the only chaparral habitat that occurs in western Placer County. The species composition of this habitat varies with its location, elevation, and soil type. Typically, a montane chaparral habitat will include shrub species such as ceanothus, manzanita, bitter cherry, huckleberry oak, sierra chinkapin, juneberry, fermont silktassel, Gerrene goldenweed, mountain mahogany, toyon, sumac, and California buckthorn. Animal species supported in montane chaparral habitats include numerous rodents, deer and other herbivores, and many birds. In addition to montane chaparral, shrub-dominated habitats found in eastern Placer County include alpine dwarf-shrub and bitterbrush. Central Placer County supports the mixed chaparral habitat type.

The alpine dwarf-chaparral typically consists of low-growing species, including creambush oceanspray, Greene goldenweed, and mountain white heather. In the high Sierra, species composition also includes columbine, heart willowweed, Davidson's penstemon, Jacobs-ladder, and Coville's phlox. Alpine dwarf-chaparral provides habitat for many birds, including blue grouse, rufous hummingbird, mountain bluebird, and gray-crowned rosy finch. This habitat also supports many small mammals — shrews, moles, rabbits, yellow-bellied marmot, and gophers — as well as mountain sheep. Bitterbrush is found in the far eastern areas of Placer County, continuing north along California's border with Nevada. The dominant species in bitterbrush habitats are antelope bitterbrush and desert bitterbrush. Other species found in this habitat are varied, and include big sagebrush, rubber rabbitbrush, gray horsebrush, pine trees, and various understory species. This habitat provides valuable foraging habitat for many animals, including mule deer, pronghorn, cattle, sheep, and horses. Many species of birds, rodents, and insects are also found here.

The mixed chaparral habitat contains similar plant species to montane chaparral communities, with additional, more specialized plant species occurring in certain habitats. For example, mixed chaparral habitats typically include scrub oak and chaparral oak, and may support foothill pines. Mixed chaparral areas provide habitat for many common wildlife species, all of which are also found in other shrub-dominated habitats throughout the state.

Herbaceous-Dominated Habitats

Herbaceous cover must be a minimum of two percent while maximum cover of both tree and shrub is 10% in herbaceous-dominated habitats. Dense herbaceous cover may provide up to 100% ground coverage. Some wetland habitats, such as marshes and other emergent wetlands,

are also classified as herbaceous-dominated. This discussion focuses on annual grasslands, since the wetland habitats were discussed above.

Annual grasslands are found in western Placer County and throughout the western portions of the state of California. Typically, this habitat type is interspersed with vernal pools, other grasslands, and oak woodlands. Grasslands tend to be dominated by introduced annual grasses, such as wild oats, soft chess, ripgut brome, red brome, wild barley, and foxtail fescue. Many wildflowers and other forbs also occur in this habitat. Grasslands provide foraging habitat for a wide variety of animal species, some of which also use grasslands for other life cycle needs. Many species that forage in grasslands require other habitat types for breeding, resting, and escape cover. Animals that can usually be found in grasslands include reptiles, small mammals, coyote and kit fox, and many birds. The giant garter snake is a special status species known to occur in grasslands in the counties of Sacramento, Yolo, and Solano, but has not been documented to occur in Placer County.

Developed Habitats

Developed habitats are areas manipulated to serve functions for agriculture, residential, commercial, and industrial uses. Agricultural areas are generally limited to western Placer County, while residential, commercial, and industrial areas are distributed throughout Placer County, with the greatest density in the western area along transportation corridors. Row-crop agriculture and rice fields provide the most resources for wildlife of developed habitats, although landscaped areas in other developed habitats also provide some resources.

Special Status Species Resources

The varied habitat types present throughout Placer County support a wide range of plant and animal species. As discussed in Section 9.2, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and the California Native Plant Society have identified many species known to occur in Placer County as species of concern, threatened, or endangered. *Table 9.1* provides a list of all such species. Future development activities in Placer County must not jeopardize the continued survival of these species.

Table 9.1
Special Status Species Known to Occur in Placer County

Common Name	Scientific Name	Status*	Habitat Description
Plants			
Big-scale balsamroot	Balsamorhiza macrolepis macrolepis	List 1B	Chaparral, cismontane woodland; valley and foothill grassland [often serpentinite]
Brandegee's Clarkia	Clarkia biloba brandegeae	List 1B	Foothill woodland, yellow pine forest, chaparral and cismontane woodland. Often found in roadcuts and/or serpentine soil.
Sanford's Arrowhead	Sagittaria sanfordii	FSC/List 1B	Marshes, swamps, and ditches: assorted shallow freshwater.

Common Name	Scientific Name	Status*	Habitat Description
Invertebrates			
Vernal pool fairy shrimp	Branchinecta lynchi	FT	Occurs in vernal pools in the Central Valley.
Lake Tahoe benthic stonefly	Capnia lacustra	FSC	Found in Lake Tahoe at depths between 95 and 400 feet.
Valley elderberry longhorn beetle	Desmocerus californicus dimorphus	FT	Uses blue elderberry shrubs (Sambucus mexicana) as its exclusive host plant, which grows in riparian and oak woodlands.
Vernal pool tadpole shrimp	Lepidurus packardi	FE	Occurs in vernal pools and other temporary pools in the Central Valley.
California linderiella	Linderiella occidentalis	FSC	Occurs in vernal pools in the Central Valley.
Spiny rhycophilan caddisfly	Rhycophila spinata	FSC	Occurs in cool running water in the foothill regions.
Amphibians			
California red-legged frog	Rana aurora draytonii	FT/CSC	Occurs in lowlands and foothills in deeper pools and streams with emergent wetland vegetation. Requires 11-20 weeks of water for larval development.
Foothill yellow-legged frog	Rana boylii	FSC/CSC	Found in partially shaded, shallow streams with rocky substrates. Needs some cobble-sized rocks as a substrate for egg laying.
Mountain yellow-legged frog	Rana muscosa	FE/CSC	Occurs in stream, lakes, and ponds in montane riparian, wet meadow, and conifer forest habitats.
Western spadefoot toad	Scaphiopus hammondii	FSC/CSC	Found primarily in grassland habitats, but may occur in valley and foothill woodlands. Requires vernal pools, seasonal wetlands, or stock ponds for breeding and egg laying.
Reptiles			
Western pond turtle Northwestern pond turtle	Clemmys marmorata C. m. marmorata	CSC FSC/CSC	Inhabits ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Needs suitable basking sites and upland habitat for egg laying.
California horned lizard	Phrynosoma coronatum frontale	FSC/CSC	Found in a variety of habitats, but most common in sandy washes with scattered shrubs. Requires open areas for sunning, shrubs for cover, and sandy soil for hiding. In Auburn region, primarily associated with rocky chaparral areas with loose soils.
Birds			
White-tailed kite (nesting)	Elanus leucurus	FSC/CFP	Found in lower foothills and valley margins with scattered oaks and along river bottomlands or marshes adjacent to oak woodlands. Nests in trees with dense tops.
Cooper's hawk (nesting)	Accipiter cooperii	CSC	Open woodlands, primarily near riparian areas. Usually nests in deciduous trees with a dense canopy.

Common Name	Scientific Name	Status*	Habitat Description
Northern harrier (nesting)	Circus cyaneus	CSC	Frequents meadows, grasslands, open rangelands, freshwater emergent wetlands; seldom found in wooded areas. Nests on ground in shrubby vegetation near marsh edge.
Burrowing owl (burrow sites)	Athene cunicularia	FSC/CSC	Found in annual and perennial grasslands. Nests in burrows dug by small mammals, primarily ground squirrels.
Long-eared owl (nesting)	Asio otus	CSC	Occurs in dense, mixed forests and tall shrublands, usually next to open spaces, such as grasslands and meadows.
Loggerhead shrike (nesting)	Lanius Iudovicianus	FSC/CSC	Found in broken woodlands, shrubland, and other habitats. Prefers open country with scattered perches for hunting and fairly dense brush for nesting.
Tricolored blackbird (nesting colony)	Agelaius tricolor	FSC/CSC	Colonial nester in dense cattails, tules, brambles or other dense vegetation. Requires open water, dense vegetation, and open grassy areas for foraging.
Yellow warbler (nesting)	Dendroica petechia brewsteri	CSC	Riparian deciduous habitats with low open- canopy: cottonwood, willows, alders, and other small trees/shrubs for nesting and foraging.
Yellow breasted chat (nesting)	Icteria virens	CSC	Riparian thickets of willow and other brushy tangles near watercourses. Nests low in shrubs or small trees in dense riparian vegetation.
Northern goshawk (nesting)	Accipiter gentiles	FSC/CSC	Occurs in upper elevation dense conifer and mixed forests.
Great blue heron (nesting colony)	Ardea herodias	CDF	Colonial nester in large trees near shallow estuaries and emergent wetlands.
Swainson's hawk	Buteo swainsoni	FSC/CT	Nests in isolated trees in riparian and grassland habitats.
Black swift	Cypseloides niger	FSC/CSC	Nests on cliffs near waterfalls in steep canyons.
Willow flycatcher	Empidonax traillii	CE	Nests in wet meadows and montane riparian habitats in the Sierra Nevadas.
Harlequin duck	Histrionicus histrionicus	FSC/CSC	Rare nester along shores of swift, shallow rivers.
Osprey	Pandion haliaetus	CSC	Nests in ponderosa pine and mixed conifer forests near large, fish-bearing waters.
Mammals			
Pallid bat	Antrozous pallidus	CSC	Occurs in a wide variety of habitats: grassland, shrubland, woodland, and forest. Most common in open, dry habitats with rocky areas for roosting. Night roosts often include porches and open buildings.
Yuma myotis bat	Myotis yumanensis	FSC/CSC	Inhabits forests and woodlands. Requires water over which it feeds. Roosts in caves, mines, buildings, or crevices.

Common Name	Scientific Name	Status*	Habitat Description
Townsend's big-eared bat	Plecotus townsendii	CSC/FSC	Found in all but subalpine and alpine habitats. Roosts in limestone caves, lava tubes, mines, and buildings.
Sierra Nevada mountain beaver	Aplodontia rufa californica	FSC/CSC	Occurs in Sierra Nevadan dense riparian- deciduous forest and montane riparian areas.
California wolverine	Gulo gulo luteus	FSC/CT	Occurs in a variety of habitats in the Sierra Nevadas, including mixed conifer and montane riparian habitats.
American marten	Martes americana	FSC	Occurs in mixed conifer forests with more than 40 percent canopy closure.
Pacific marten	Martes pennati pacifica	FSC/CSC	Occurs in conifer forests and riparian woodlands with dense canopy.

*The abbreviations for the "Status" column are defined as:

FEDERAL STATE **CNPS** FE = Federal Endangered CE = California Endangered List 1A = Extinct

List 1B = Rare, threatened, or endangered FT = Federal Threatened CT = California Threatened

in CA or elsewhere

List 2 = Rare, threatened, or endangered in FC = Federal Candidate CR = California Rare

CA, more common elsewhere

FSC = Federal Species of List 3 = More information is needed; a CC = California Candidate Concern

review list

FSLC = Federal Species of CSC = California Species of List 4 = Limited distribution: a watch list Local Concern

CFP = California Fully Protected CDF = California Department of Forestry Sensitive Species

Special Concern

9.2 REGULATORY FRAMEWORK

Federal Regulation Clean Water Act

The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency regulate the discharge of dredge and fill material into waters of the United States under Section 404 of the Clean Water Act. The Corps will typically exert jurisdiction over that portion of a project area that contains waters of the United States and adjacent or isolated wetlands. This jurisdiction includes approximately the bank-to-bank portion of a creek along its entire length up to the ordinary high-water mark, and adjacent wetland areas that will either be directly or indirectly adversely affected by a proposed project.

When a project proposes to fill less than one-tenth of an acre of wetlands, no prior approval from the Corps is necessary. Instead a "post-construction notification" is filed. When a project proposes to fill between one-tenth and one-half of an acre of wetlands, a "pre-construction notification" is filed. Such projects are usually authorized under a Nationwide Permit. These are permits that have been developed to "streamline the evaluation and approval process throughout the nation for certain types of activities that have only minimal impacts to the aquatic environment" (Corps 2002). Each Nationwide Permit carries standard conditions of approval that must be met by the permit holder. The conditions include minimization of the

impact to waters of the U.S., use of Best Management Practices to control erosion and impacts to water quality, and compensation for impacts through preservation of other wetlands.

Federal Endangered Species Act

The federal Endangered Species Act prohibits the "take" of species (including animals and plants) listed by the U.S. Fish and Wildlife Service as endangered or threatened. The federal Endangered Species Act does not protect species that have been proposed for listing but have not yet been listed. "Take" is defined to include harassing, harming (including significantly modifying or degrading habitat), pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct. Actions that cause the take of endangered or threatened species can result in civil or criminal penalties.

The federal Endangered Species Act guidelines prohibit any federal action, including funding or the issuance of permits for projects that would jeopardize the existence of a threatened or endangered wildlife or plant species. The U.S. Army Corps of Engineers must consult with the U.S. Fish and Wildlife Service to determine if the issuance of a permit for fill in wetlands would jeopardize any threatened or endangered species that may be affected by a proposed project. In the context of a development project, the Federal Endangered Species Act would be triggered if the project would result in the take of a threatened or endangered species or if issuance of a Section 404 permit or other federal agency action could jeopardize a listed species or adversely affect designated critical habitat.

State Regulation

California Endangered Species Act

The California Endangered Species Act restricts the "take" of plant and wildlife species listed by the state as endangered or threatened, as well as candidates for listing. Section 86 of the California Fish and Game Code defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." As an implementation measure, the California Endangered Species Act directs agencies to consult with the California Department of Fish and Game regarding projects or actions that could affect listed species. Through this consultation, the California Department of Fish and Game must determine if jeopardy to listed species would occur, and identify "reasonable and prudent alternatives" to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if the agency determines that there are "overriding considerations;" however, the agencies are prohibited from approving projects that would cause the extinction of a listed species.

Mitigating impacts on state listed species involves avoidance, minimization, and compensation (listed in order of preference). Unavoidable impacts on state listed species are typically addressed in a detailed mitigation plan prepared in accordance with California Department of Fish and Game guidelines. The California Department of Fish and Game exercises authority over mitigation projects involving state listed species, including those resulting from CEQA mitigation requirements.

Fish and Game Code Section 1600: Streambed Alteration Agreements

Under Chapter 6 of the California Fish and Game Code, the California Department of Fish and Game is responsible for the protection and conservation of the state's fish and wildlife

resources. Section 1600 et. seq. of the code defines the responsibilities of the California Department of Fish and Game and the requirements for public and private applicants to obtain an agreement to "divert, obstruct, or change the natural flow or bed, channel, or bank of any existing fish or wildlife resource or from which those resources derive benefit, or will use material from the streambeds designated by the department." Public agencies file 1601 applications and private parties file 1603 applications for streambed alteration agreements. The local California Department of Fish and Game warden or unit biologist typically has responsibility for issuing streambed alteration agreements. These agreements usually include specific requirements related to construction techniques and remedial and compensatory measures to mitigate for adverse impacts. The California Department of Fish and Game may also require long-term monitoring as part of an agreement to assess the effectiveness of the proposed mitigation. Additionally, the California Department of Fish and Game has adopted a no-net-loss policy for wetlands.

Local Regulation

Placer County General Plan

The *Placer County General Plan* includes policies and implementing actions regarding design, development, and planning within Placer County in order to meet the stated goals of preserving the health of natural resource communities. With respect to protection of water resources and wetlands, policies include establishment of minimum buffers, requirements to mitigate impacts, use of Best Management Practices to reduce impacts, and protection of upland habitats that contribute to the health of water resources. Other wildlife habitats are protected through implementation of policies that require avoidance of significant impacts to identified significant ecological resource areas, control of the use of pesticides, preservation of habitats of rare or endangered wildlife and plant species, preparation of a biotic analysis of a project site prior to issuance of any discretionary approvals, avoidance of substantial vegetation removal, and revegetation of a project site with native and native-compatible plants. Other policies require the establishment and preservation of open space lands, especially in areas with sensitive biological resources.

Community Plans

Auburn/Bowman Community Plan

The *Auburn/Bowman Community Plan* expresses goals and policies for the protection of biological resources in its Environmental Resources Management Element, which addresses natural resources, open space, and cultural resources. Goals related to biological resources include protection of the habitat value of natural waterways to wildlife and plants; preservation of "outstanding areas" of native vegetation and trees, natural topography, wildlife habitats and corridors, and riparian corridors; conservation of grassland and woodland areas; and protection of special status species and enhancement of the habitat that supports them.

Policies regulating development are similar to those of the General Plan, including establishment of minimum buffers, requirements to mitigate impacts, use of Best Management Practices to reduce impacts, and protection of upland habitats that contribute to the health of water resources. Other polices require conservation of natural vegetation and landforms, preparation of biotic assessments of project sites, revegetation of disturbed areas with native and native-compatible plants, and preservation of special status plant and wildlife species.

Foresthill General Plan

The goals of the *Foresthill General Plan* related to biological resources are to identify natural resources and allow for their preservation and enhancement, ensure development can occur with minimal adverse affect to the natural resources of the area, and preserve areas of outstanding natural vegetation, fish, and wildlife habitat. Policies to support these goals relevant to the Proposed Zoning Text Amendment include using open space and agricultural preservation easements, preserving the natural condition of all flood plains and riparian vegetation areas, preserving all important fish and wildlife areas, and providing for the protection of all rare or endangered species.

Granite Bay Community Plan

The Resources Section of the *Granite Bay Community Plan* contains the goals and policies relating to conservation and open space. The conservation of natural resources is seen as a critical component of maintaining the community's rural atmosphere. Goals applicable to the protection of biological resources include preservation and protection of the natural features and resources of the community, maintenance of a balanced environment, ensuring that physical development occurs with minimum adverse effects on the natural resources of the area, and preservation of all outstanding areas of natural vegetation and wildlife.

Policies of the *Granite Bay Community Plan* that support these goals include conserving the natural landscape, minimizing disturbance to natural terrain and vegetation, replanting areas where vegetation removal is necessary with a focus on using native and native-compatible plants, avoiding encroachment of land development on areas "rich in wildlife or of a fragile ecological nature," encouraging the use of ecologically innovative techniques, requiring compliance with the County tree preservation ordinance, and requiring biotic evaluations of project sites to ensure compliance with these policies and goals.

Horseshoe Bar/Penryn Community Plan

The Natural Resources Management Element of the Horseshoe Bar/Penryn Community Plan establishes the goals and policies regulating impacts of development on biological resources present in the plan area. The goals of this element relevant to biological resources include conservation of soils, preservation of natural waterways and bodies of water to "ensure water quality, flora and fauna species diversity and unique wildlife habitat preservation," and preservation of outstanding areas of natural vegetation and habitat (especially habitat for special status species). Policies that support the attainment of these goals include implementation of the Placer County Grading Ordinance and preparation of slope analysis to ensure that new development does not significantly contribute to soil erosion; application of Best Management Practices to protect water, soil, and habitat resources; promotion of water conservation through development standards, building requirements, and landscape design guidelines; preservation of the natural conditions of streams, creeks, canals, and floodplains; avoidance and mitigation of impacts to water resources as necessary, including provision of buffer standards and requiring the use of native and native-compatible vegetation in landscaping; and conservation of large open space areas to provide habitat for plants and wildlife, with particular focus on preservation of breeding habitat and migratory routes.

Meadow Vista Community Plan

Goals and policies for the protection of biological resources are identified and discussed in the Natural Resources element of the *Meadow Vista Community Plan*. Most of the goals and policies are very similar to those of the General Plan, including the goals of preserving vegetative resources, enhancing the natural qualities of streams and creeks, protecting wetland communities and related riparian areas, protecting and enhancing wildlife habitats, and preserving and enhancing open space areas.

Policy requirements for new development in Meadow Vista include minimizing disturbance to existing landforms, landscaping with native and native-compatible vegetation, complying with the County tree preservation ordinance, avoiding impacts to special status plant and animal species and the habitats of all plants and wildlife, conserving sufficient large open space areas to provide adequate plant and wildlife habitat, providing buffers between new development and existing water resources, avoiding or mitigating for impacts to stream and creek corridors, using Best Management Practices to protect water resources, integrating natural watercourses into new development in a beneficial way, restoring previously impacted watercourses, complying with all requirements of the U.S. Army Corps of Engineers to protect wetlands and mitigate for any impacts, and requiring biotic evaluations of project sites.

Dry Creek West Placer Community Plan

The Environmental Resources Management Element of the *Dry Creek West Placer Community Plan* establishes the goals of protecting rare, threatened, and endangered species and their habitats; conserving fish and wildlife habitats to ensure sustainable populations; protecting groundwater from degradation and depletion; maintaining water quality and habitat values of natural waterways; preserving outstanding areas of natural vegetation; and protecting agricultural lands from urban encroachment. Policies that support attainment of these goals and are relevant to the proposed Zoning Text Amendment include requiring preservation of all stream environment zones and floodplains; protecting important fish and wildlife habitat areas and areas of unique or significant natural vegetation; requiring new development to minimize removal of natural vegetation and to replace removed vegetation with an emphasis on using native and drought tolerant species; prohibiting construction activities within the Dry Creek floodplain; requiring site specific studies of biological resources for projects that could impact unique or significant fish, wildlife, or vegetative resources, including vernal pools; preserving agricultural lands; and requiring implementation of mitigation measures as necessary.

Placer County Tree Preservation Ordinance

Placer County has enacted a tree preservation ordinance that requires County approval prior to the removal of landmark or preserved trees, groves of native trees, native tree corridors, and significant stands of native tree habitats. Placer County's tree ordinance (Chapter 12.16 of the Placer County Code) also prohibits the removal of trees from riparian areas without analysis of environmental impacts and the implementation of mitigation measures. For each tree identified for removal, and/or tree with disturbance to its dripline, replacement shall be as follows: one 15-gallon native oak tree for each tree removed or disturbance to its dripline; or five 1-gallon native oak trees for each tree removed or disturbance to its dripline; or fifteen seedlings and/or seeds for each tree removed or disturbance to its dripline; or fifteen seedlings and/or seeds for each tree removed or disturbance to its dripline.

9.3 PROJECT IMPACTS

Significance Criteria

A biological resource impact would be significant if any of the following conditions, as described in Appendix G of the CEQA Guidelines, would result with implementation of the proposed project:

- Disturbance of a significant natural vegetation type;
- Disturbance or degradation of waters or wetlands subject to U.S. Army Corps of Engineers jurisdiction under the federal Clean Water Act;
- Adverse affects on a population or the critical habitat of rare or endangered plants or animals;
- Substantial interference with the movement of resident or migratory fish or wildlife;
- Substantial reduction in habitat for fish, wildlife, or plants; or
- Conflicts with adopted goals, policies or regulations of relevant regulatory agencies.

Impacts Determined to be Less Than Significant

Disturbance or Degradation of Waters of the U.S. All direct impacts to waters of the U.S. must be permitted through the U.S. Army Corps of Engineers. Grading and building permits are not issued by Placer County for projects that impact waters of the U.S. without verification of the project applicant's compliance with the Corps permit process. Indirect impacts to wetlands can still result from land development projects. As discussed in CHAPTER 2 PROJECT DESCRIPTION, approximately 156 acres of plant nurseries are anticipated to develop under the proposed ordinance provisions by 2020. No changes to the permissibility of Plant Nurseries, Retail are proposed, which are allowed in the C2, C3, HS, and IN zones and require a use permit in other zones where they may locate. The proposed Zoning Text Amendment would make Plant Production, Plus Nurseries an allowed use in these four zones and require a use permit in other zones where they may locate (all zones where crop production is currently an allowed use). The issuance of a use permit would allow for implementation of site specific mitigation measures when indirect impacts may occur. Plant Production Nurseries would be allowed to locate in any zone where crop production is currently allowed, with the additional requirement of a Minor Use Permit in the RA and RF zones if the growing area exceeds five acres. As with Plant Nurseries, Retail and Plant Production, Plus Nurseries, the use permit requirement allows for the implementation of mitigation measures as necessary to minimize impacts. Based on the small amount of anticipated development relative to the amount of water resources present in Placer County, the use permit requirements for a substantial portion of the anticipated development, and the requirements associated with the issuance of grading and building permits, the proposed ordinance amendments will have less than significant impacts on waters of the U.S.

Substantial Interference with the Movement of Resident or Migratory Fish or Wildlife. Development of plant nurseries under the proposed Zoning Text Amendment is not expected to result in significant impacts to migratory corridors, rivers and streams, or resting habitat for migratory animals. Approximately 156 acres of new plant nurseries are anticipated to develop under the proposed project, primarily within the RA and F zones. Many plant nurseries will

require issuance of a use permit prior to development, which will allow for the implementation of mitigation measures to protect migratory wildlife resources. Based on the small numbers of acres that could be developed as plant nurseries without further environmental review, impacts to migratory resources under the proposed project would be less than significant.

Substantial Reduction in Habitat for Fish, Wildlife, or Plants. Implementation of the proposed Zoning Text Amendment is expected to result in the development of 156 acres of new plant nurseries. In relation to the 964,140 acres of land within Placer County, the development of far less than one percent of the land in the county is expected to result in less than significant impacts to the presence of habitat for fish, wildlife, and plants in Placer County.

Conflict with Adopted Goals, Policies or Regulations of Relevant Regulatory Agencies. The proposed project consists of a Zoning Text Amendment and does not include any specific development of new land uses. For new plant nurseries that could develop under the proposed zoning ordinance provisions, Placer County would ensure that all new development projects comply with the regulations of regulatory agencies, such as the U.S. Army Corps of Engineers and the California Department of Fish and Game, upon issuance of grading and building permits or during the environmental review process required for issuance of a use permit. Therefore, the proposed project results in no conflicts with regulatory agency goals, policies, and regulations.

Impact 9.1: Disturbance of a Significant Natural Vegetation Type

Significance Before Mitigation	Potentially Significant
Mitigation Measures	9.1a through 9.1c
Significance After Mitigation	Less than Significant

While only 156 acres of plant nurseries are anticipated to result from implementation of the proposed project, some rare or critical vegetative communities could be significantly impacted by the development of only a few acres. Some types of rare vegetative communities that are known to occur in Placer County include grasslands composed of predominantly native species, blue oak woodlands and blue oak-foothill pine woodlands, vernal pools, and meadows and seeps supported by alkali soils. These habitat types are located throughout Placer County, with many of them located in lands zoned RA and F, which is where the majority of new nursery development is expected to occur, as discussed in **Chapter 2 Project Description**. In particular, oak woodlands, grasslands, and vernal pools occur in the RA and F zones in western Placer County.

Mitigation measures to reduce the potential impacts to woodland habitats to a less than significant level include compliance with the Placer County tree preservation and grading ordinances. Mitigation measures to reduce the potential impacts to wetland habitats to a less than significant level include compliance with all policies and regulations of the U.S. Army Corps of Engineers, and with federal and state laws regarding the protection of habitat for special status species.

Impact 9.2: Adverse Affects on a Population or the Critical Habitat of Rare or Endangered Plants or Animals

Significance Before Mitigation	Potentially Significant	
Mitigation Measure	9.2a	
Significance After Mitigation	Less than Significant	

While only 156 acres of plant nurseries are anticipated to result from implementation of the proposed project, some rare or endangered plants and animals could be significantly impacted by the development of only a few acres. A list of all special status species known to occur in Placer County is provided in *Table 9.1*. As no specific nursery development is proposed as part of this project, the future impacts to special status species cannot be evaluated at this time. However, all future nursery development would be subject to the requirements of the state and federal endangered species acts. Placer County would be responsible for ensuring this compliance upon issuance of grading and building permits, as identified in Mitigation Measure 9.2a.

9.4 MITIGATION MEASURES

Disturbance of a Significant Natural Vegetation Type

- Mitigation Measure 9.1a: Applicants for new nursery development shall comply with the requirements of the Placer County tree preservation ordinance, including requirements for tree replacement and protection during development activities.
- Mitigation Measure 9.1b: Site grading and clearing activities for development of plant nurseries will require the issuance of Grading Permits. Article 15.48.240 of the Placer County Code specifies the conditions under which grading permits may be issued. Specific to biological resources, the Director of Public Works is directed to impose conditions to safeguard watercourses, including prevention of erosion and avoidance of siltation.
- Mitigation Measure 9.1c: Prior to approval of grading permits, applicants for new nursery development shall furnish to Placer County evidence that the California Department of Fish and Game, the U.S. Army Corps of Engineers, the National Marine Fisheries Services, and the U.S. Fish and Wildlife Service have been notified by certified letter regarding the existence of wetlands, including vernal pools, and habitat for special status species on the property. If permits are required, they shall be obtained and copies submitted to Placer County prior to any clearing, grading, or excavation work.

Adverse Affects on a Population or the Critical Habitat of Rare or Endangered Plants or Animals

Mitigation Measure 9.2a: Prior to approval of grading permits, applicants for new nursery development shall furnish to Placer County evidence that the California Department of Fish and Game, the U.S. Army Corps of Engineers, the National Marine Fisheries Services, and the U.S. Fish and Wildlife Service have been notified by certified letter

regarding the existence of wetlands, including vernal pools, and habitat for special status species on the property. If permits are required, they shall be obtained and copies submitted to Placer County prior to any clearing, grading, or excavation work. (*This measure is also listed as Mitigation Measure 9.1c.*)

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CHAPTER 10

HYDROLOGY AND WATER QUALITY

CHAPTER 10 HYDROLOGY AND WATER QUALITY

Site-specific hydrologic characteristics affect the decision to develop a plant nursery. Access to sufficient quantities of high quality water and the drainage characteristics of the site are significant determinants in nursery location decisions. This section of the EIR discusses changes to water sources, water quality, and flooding potentially resulting from the proposed Zoning Text Amendment. Water supply and usage are discussed in Chapter 11 Utilities and Service Systems.

10.1 SETTING

Surface Water

Placer County's topography varies from the low grasslands of the Sacramento Valley to the foothill valleys and the canyons and mountains of the Sierra Nevada range. The average annual rainfall in the county is 35.91 inches and the average annual snowfall in the Lake Tahoe Basin is 400 inches. Rainfall is concentrated in winter months; almost 90% of all rainfall typically occurs between November and April. The main water bodies in Placer County are lakes, reservoirs, rivers, creeks, and streams. The man-made reservoirs of Folsom Lake, French Meadows, and Hell Hole are the largest lakes in the county. The considerable snowfall and resulting melt provides the region with a high quality water supply through reservoirs, aqueducts, and treatment projects.

Flooding

Regional and local flooding may occur during seasonal rains from November through April. Flooding is generally caused by a combination of prolonged rainfall leading to soil saturation and intense periods of rain. Construction of buildings, roads, parking lots, and other impermeable surfaces result in sheet-flow of runoff and decreases the amount of water percolating through the soil and recharging aquifers on sites with permeable soils. Impermeable surfaces increase the rate at which water will travel to areas downstream from the development and could increase local flooding conditions.

Groundwater

The quality of groundwater depends primarily on the quantity and quality of surface water (e.g., rainfall or irrigation water) that percolates into the ground, and the subsequent chemical interactions that occur with the soils and bedrock in the saturated aquifer layers. Important factors affecting groundwater quality are vegetative cover, land use practices, soil permeability, location of pollutant sources, and depth to groundwater. Other factors that can affect groundwater quality include disposal of municipal wastewater through spray irrigation; use of septic tanks and leachate from septic tanks; agricultural use of water, fertilizers, and pesticides; hazardous material spills, especially from industrial and commercial processes; leachate from hazardous waste storage facilities or solid waste landfills; infiltration of contaminated urban stormwater runoff; and seepage of wastes from concentrated livestock operations (NFA 2001).

10.2 REGULATORY FRAMEWORK

Clean Water Act

The U.S. Army Corps of Engineers regulates the placement of fill or dredged materials that affect waters of the U.S., including stream courses and jurisdictional wetlands. The Corps is the authority designated by Section 404 of the Clean Water Act. Any development that affects waters under the Corps jurisdiction requires a permit. This is further discussed in **CHAPTER 9 BIOLOGICAL RESOURCES**.

Discharge of stormwater runoff or other discharges into any surface waters of the State is regulated through the National Pollutant Discharge Elimination System (NPDES) permitting process, as mandated by Section 303 of the federal Clean Water Act. The NPDES program is administered by the State Water Resources Control Board, and implemented by the Regional Water Quality Control Boards. The NPDES program is applicable to all discharges to waters of the U.S. The Central Valley Regional Water Quality Control Board (for most of the county) and the Lahontan Regional Water Quality Control Board (for areas of the county in the Lake Tahoe area) are the responsible agencies for discharge regulation.

Surface Water Protection Program

The California Department Pesticide Regulation (DPR), a department of the California Environmental Protection Agency (CalEPA), administers the Surface Water Protection Program with the goal of characterizing pesticide residues, identifying contamination sources, determining the mechanisms of offsite movement of pesticides to surface water, and developing site-specific mitigation strategies. These activities are done primarily through surface water monitoring in consultation with other agencies, and research into factors that lead to offsite movement.

Placer County Flood Control and Water Conservation District

The Placer County Flood Control and Water Conservation District was formed to address flood control issues that arise from growth. The main purpose of the District is to protect lives and property from the effects of flooding by comprehensive, coordinated flood prevention planning, using consistent standards to evaluate flood risk, and by implementing "Best Management Practices" (BMP) flood control measures on specific project proposals through the *Placer County Storm Water Management Manual*. Typical storm water and erosion reduction measures include construction management techniques, erosion protection at culvert outfall locations, geotextile fabric liner use, cutoff trenches, sediment and retention basins, and grassy swales (Placer County 2003).

Placer County Code Article 15.48 Grading, Erosion and Sediment Control

In addition to the General Plan and Community Plan goals and policies discussed below, the Placer County Flood Control and Water Conservation District's *Stormwater Management Manual*, the *Placer County Land Development Manual*, *Placer County Grading Ordinance*, and *Placer County Flood Damage Prevention Ordinance* provide standards for the design and performance of new storm drainage systems.

Article 15.48 regulates grading on property "to safeguard life, limb, health, property and public welfare; to avoid pollution of watercourses with hazardous materials, nutrients, sediments, or

other earthen materials generated on or caused by surface runoff on or across the permit area; and to ensure that the intended use of a graded site is consistent with the *Placer County General Plan*, any specific plans adopted thereto, applicable Placer County ordinances, the Placer County Environmental Review Ordinance (Chapter 18 Placer County Code), and applicable chapters of the California Building Code. In the event of conflict between applicable chapters and this article, the most restrictive shall prevail (Ord. 5056-B (part), 2000).

Placer County General Plan

The *Placer County General Plan* goals related to hydrology and water quality include collecting and disposing of stormwater with the least inconvenience to the public while reducing potential water-related damage and enhancing the environment, and protecting the natural qualities of Placer County's streams, creeks and groundwater. General Plan policies that will work towards attainment of these goals include encouraging the use of natural stormwater drainage systems; obtaining easements for drainage and other public uses of floodplains where desirable; encouraging good soil conservation practices in agricultural and urban areas; using Best Management Practices such as artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, and oil/grit separators to improve the quality of runoff; and evaluating potential flood hazards of new development through the review of accurate topographic and flow characteristics information and depiction of the 100-year floodplain boundaries on a project site.

Community Plans

Auburn/Bowman Community Plan

The Auburn/Bowman Community Plan Environmental Resources Management Element expresses the goals of conserving surface water and groundwater supplies and protecting the quality of such supplies; adequately planning for the development and protection of these resources for future generations; safeguarding natural waterways to ensure water quality, flora and fauna species diversity and unique wildlife habitat preservation; and reducing flood hazards both on specific project sites and downstream. Implementing policies of this plan include eliminating existing water pollution sources; discouraging activities which include the use of hazardous materials around wetland and groundwater recharge areas; promoting water conservation through development standards, building requirements, landscape design guidelines, and other applicable policies and programs; requiring new development to detain increases in peak stormwater runoff; and reducing water quality impacts by requiring commercial, industrial, and residential projects to treat urban runoff before it enters intermittent or permanent streams through the use of Best Management Practices.

Foresthill General Plan

Major drainages within the Foresthill area include Devils Canyon, First, Second, and Third Brushy Canyons, Blackhawk Canyon, and Shirttail Canyon. The drainages on the south side of the plan area typically are tributary to the Middle Fork of the American River while drainages on the north side of the plan area are tributary to the North Fork. The Foresthill General Plan states that ongoing development in the plan area will require that "design considerations be made to minimize adverse environmental impacts on drainage courses," especially the avoidance of degradation of water quality in both forks of the American River. Goals of the Foresthill General Plan related to hydrology and water quality include ensuring a balanced

environment while permitting continued development, maintaining water resources consistent with federal, state, and local quality standards, and preserving outstanding areas of fish habitat. Policies to support these goals relevant to the proposed Zoning Text Amendment include adopting a grading ordinance, avoiding development in highly sensitive areas, using "ecologically innovative" techniques, reviewing proposed developments for their potential affects on water quality, and preserving the natural condition of all stream influence areas.

Granite Bay Community Plan

The *Granite Bay Community Plan EIR* and technical supplement contain a detailed discussion of groundwater. The implementation discussion in the Natural Resources Section of the community plan calls for the preservation of floodplains. Only work permitted by the *Placer County Flood Damage Prevention Ordinance* can be done in the floodplain. The plan establishes a building setback of 100 feet from the centerline of permanent streams and a 50-foot setback from the centerline of intermittent streams and creeks, or from the 100-year floodplain. The Resources section of the *Granite Bay Community Plan* contains goals of preserving natural features and resources of the community, and protecting the high quality of air and water resources. The community plan includes the following policies for new development adopted to ensure attainment of the goals expressed: conserve the natural landscape and consider environmental resources in site planning; minimize vegetation removal; use ecologically innovative techniques as feasible; maintain all stream influence areas, including floodplains and riparian vegetation areas, in their natural condition; avoid construction in floodplains; and avoid grading during the rainy season.

Meadow Vista Community Plan

Section 9: Natural Resources of the *Meadow Vista Community Plan* identifies the goals of protecting and enhancing the natural qualities of Placer County's streams, creeks and groundwater and protecting wetland communities and related riparian areas in the community plan area. Policies that support these goals include provision of sensitive habitat buffers from streams and riparian vegetation; avoidance of or mitigation for encroachment of new development into stream/riparian habitat areas; preservation of creek corridors and setback areas; requirements for the use of Best Management Practices; prohibitions on grading during the rainy season; encouragement of the protection of floodplains; supporting the "no net loss" policy of the U.S. Army Corps of Engineers for wetlands; and discouraging direct runoff of pollutants and siltation into wetland areas.

Horseshoe Bar/Penryn Community Plan

Section 3 of the *Horseshoe Bar/Penryn Community Plan* Environmental Resources Management Element expresses the goals of conserving surface water and groundwater supplies and protecting the quality of such supplies, protecting natural waterways to ensure adequate habitat for vegetation and wildlife, and protecting the Folsom Lake watershed by limiting the extent of development in the watershed. Policies adopted in this community plan include strongly discouraging development within the Folsom Lake watershed; requiring the application of feasible Best Management Practices for all new development; encouraging the use of open space to preserve and enhance watersheds, stream corridors, and wetlands; and treating runoff from new commercial, industrial, and residential projects.

Dry Creek West Placer Community Plan

The Environmental Resources Management Element of the *Dry Creek West Placer Community Plan* includes the goals of conserving fish habitats, protecting groundwater quality and maintaining the groundwater table, protecting water quality and habitat values of natural waterways, and ensuring clean water resources in order to maintain a high quality of life for plan area residents. Policies that will aid in the attainment of these goals include preserving steam environment zones in their natural condition, maintaining or improving water quality in major creeks and groundwater, protecting important fish habitat from urban encroachment, rehabilitating portions of Dry Creek that are critical to seasonal anadromous fish (salmon) runs, eliminating existing water pollution sources and discouraging activities which include the use of hazardous materials around wetland and groundwater recharge areas, limiting construction within the Dry Creek floodplain and minimizing disturbance of its tributaries, requiring use of site specific field studies and mitigation measures as appropriate, and monitoring and controlling land uses that threaten to deteriorate water quality.

10.3 PROJECT IMPACTS

Significance Criteria

Based on Appendix G of the CEQA Guidelines, the following criteria have been established for evaluating the significance of a project-related hydrology or water quality impact. A hydrology or water quality impact would be significant if any of the following conditions would result from implementation of the proposed project, including demolition, construction and operation phases:

- Violation of any water quality standards or waste discharge requirements;
- Substantial depletion of groundwater supplies or interference with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite or substantial increases in the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;
- Creation of or contribution to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Other substantial degradation of water quality;
- Placement of housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Placement within a 100-year flood hazard area of structures that would impede or redirect flood flows;
- Exposure of people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or

Inundation by seiche, tsunami, or mudflow.

Impacts Determined to be Less than Significant

Substantial Depletion of Groundwater Supplies or Interference With Groundwater Recharge. The proposed Zoning Text Amendment does not include any specific plant nursery development. As discussed in CHAPTER 2 PROJECT DESCRIPTION, it is projected that approximately 156 acres of new plant nurseries would potentially develop by 2020 within the county, with much of this development expected to occur in the RA and F zoned land in the western portion of the county. The rural location these areas may mean that there is potential for nursery development on land requiring an onsite water well or on land adjacent to residential and agricultural land uses currently using water wells and/or onsite sewage disposal systems. All domestic and commercial water wells are subject to regulation and approval of the Placer County Department of Environmental Health under Article 13 of the Placer County Code. Given the small percentage of Placer County land that is estimated to potentially be developed as plant nurseries and the regulatory requirements for approval of onsite wells and/or sewage disposal systems, the impacts to groundwater are expected to be less than significant.

Substantial Alteration of Drainage Courses or Causing Erosion or Siltation Offsite. The proposed Zoning Text Amendment is not expected to change the flood associated risk levels in the affected zoning districts, nor will they result in changes to currents or direction of water (surface or ground) movements. Flood related hazards will be mitigated at the project review stage with the implementation of standard Placer County policies and ordinances, including the Flood Damage Prevention Ordinance (Chapter 4, Subchapter XIII of the Placer County Code), Section 5 of the Placer County Land Development Manual, and the Placer County Flood Control and Water Conservation District Stormwater Management Manual. Implementation of these policies and the standards of the Stormwater Management Manual will ensure that future nursery development does not result in increased flood risks.

Placement of Housing Within a 100-Year Flood Hazard Area. Adoption and implementation of the proposed Zoning Text Amendment would have no impact on the future development of residential land uses.

Placement Within a 100-Year Flood Hazard Area of Structures that Would Impede or Redirect Flood Flows. The proposed project does not include any specific development proposals. Implementation of the proposed Zoning Text Amendment would affect the future development of plant nurseries in zones where similar development is currently allowed or permitted. Plant Nurseries, Retail and Plant Production, Plus Nurseries would require issuance of a use permit to locate in any zone where they are permitted other than the C2, C3, HS, and IN zones. Plant Production Nurseries with growing areas greater than five acres would require a use permit in the RA and RF zones. Flood hazards related to placement of new structures would be evaluated on a project-specific basis as applications for use permits are submitted to the Placer County Planning Department and applications for grading and building permits are submitted to the Placer County Department of Public Works. Mitigation for any potential impediment of flood flows would be achieved through the implementation of standard Placer County development review policies and ordinances, including the Flood Damage Prevention Ordinance (Chapter 4, Subchapter XIII of the Placer County Code), Section 5 of the Placer County Land

Development Manual, and the Placer County Flood Control and Water Conservation District Stormwater Manual. Implementation of Placer County General Plan Policies 4.E.11 and 4.F.4 require development projects to evaluate and mitigate stormwater peak flows and/or volume, and evaluate and map flood potential and flow to and from the proposed development site.

Exposure of People or Structures to a Significant Risk of Loss, Injury or Death Involving Flooding. As discussed above, the proposed project does not include any specific development projects but would change the regulations under which plant nurseries could develop. However, no changes are proposed to the standard Placer County development review policies addressed above. Implementation of these policies and standards will ensure that potential flood hazards are evaluated and minimized on a project-specific basis.

Inundation by Seiche, Tsunami, or Mudflow. Placer County is geographically removed from ocean effects, such as tsunamis (seismically generated sea waves). It not expected that a plant nursery will develop next to a lake, as such land is generally suitable for residential or recreational use, therefore lake effects, such as a seiche (random oscillation of water of a lake or bay caused by earthquake or winds), are not likely. The Placer County permit review process ensures compliance with the Placer County Grading Ordinance and Stormwater Management Manual, and ensures that a nursery would not develop on steep slopes with soils subject to saturation and resulting mudflows.

Potentially Significant Impacts

Impact 10.1 Discharge Into Surface Waters or Other Alterations of Surface Water Quality Due to Runoff

Significance Before Mitigation	Potentially Significant	
Mitigation Measures	10.1a through 10.1c	
Significance after Mitigation	Less than Significant	

Drainage and onsite grading of future individual projects could result in a potential discharge of onsite materials to nearby waterways. Plant nurseries may use pesticides, herbicides, fertilizers, and equipment fuel onsite. Through their substantial use of water, future plant nurseries could release hazardous substances into nearby waters through runoff from a site. The use of water could also create mosquito habitat, which would represent a potential health hazard for adjacent land uses. This is discussed in CHAPTER 12 HAZARDS AND HAZARDOUS MATERIALS.

The *Placer County Land Development Manual, Placer County Zoning Ordinance*, and *Placer County Code* contain water quality and waste treatment performance standards for development in Placer County. The proposed Zoning Text Amendment is not a development proposal for a specific project, nor does it alter the applicability of the performance standards of these documents as they apply to development.

Compliance with federal, state, and local regulations regarding impacts to water quality from erosion, chemical pollution, and nutrient and oxygen levels possible when developing a plant nursery will ensure that potential water quality impacts are minimized. Continued enforcement and review under these regulations for future plant nurseries proposed under the

Zoning Text Amendment will reduce the potential for water quality impacts to less than significant.

10.4 MITIGATION MEASURES

Discharge Into Surface Waters or other Alterations of Surface Water Quality Due to Runoff

- Mitigation Measure 10.1a: Site grading and clearing activities for development of plant nurseries will require the issuance of Grading Permits. Article 15.48.240 of the Placer County Code specifies the conditions under which grading permits may be issued. Specific to hydrologic resources, the Director of Public Works is directed to impose conditions to safeguard watercourses, including prevention of erosion and avoidance of siltation. (This measure is also listed as Mitigation Measure 9.1b.)
- Mitigation Measure 10.1b: Drainage facilities/improvements for future plant nurseries shall be designed in accordance with the requirements of the Placer County Storm Water Management Manual that are in effect at the time of submittal, and to the satisfaction of the Department of Public Works.
- Mitigation Measure 10.1c: Each plant nursery shall remain in compliance at all times with the licensing, training requirements and applicable regulations administered by the Placer County Agricultural and Weights and Measures Department and the State of California, as well as Best Management Practices pertinent to transportation, handling, storage, and application of pesticides, herbicides, and fertilizers. Herbicides, fungicides, and pesticides may only be applied at a nursery site by a licensed applicator in accordance with product labeling directions. Storage of chemicals onsite is contingent upon approval by the Placer County Department of Environmental Health and applicable fire district regulations. (This portion of this mitigation measure is also listed as Mitigation Measure 7.1b.)

The State Water Resources Control Board is the lead agency for coordinating and controlling water quality in California. The State Water Resources Control Board has policies and regulations governing the handling, storage and disposal of hazardous substances. Applicants for nursery development shall obtain any permits and/or other action required by the State Water Resources Control Board or the applicable Regional Water Quality Control Board.

CHAPTER 11

UTILITIES AND SERVICE SYSTEMS

CHAPTER 11 UTILITIES AND SERVICE SYSTEMS

The proposed amendments to the *Placer County Zoning Ordinance* would allow Plant Production Nurseries to be located in the zone districts that currently permit crop production uses and would establish use permit requirements for Plant Production, Plus Nurseries. Permit requirements for Plant Nurseries, Retail would not change over existing conditions. While the proposed Zoning Text Amendment is not expected to result in the need for new systems or supplies or alterations to existing utility and service systems, there is a potential for future development of plant nurseries to increase demands for utilities and services, including water supply, electricity, and solid waste disposal.

Although the proposed Zoning Text Amendment does not propose any specific development projects, it is expected that an additional 156 acres of nursery development will occur in Placer County through the year 2020 due to growth in market demand. The proposed project would change the regulations under which this development could occur. This chapter of the EIR evaluates the typical demands for service from existing plant nurseries and the need for any expansion of services.

11.1 WATER SUPPLY

11.1A Water Supply Setting

A typical nursery plant in a one-gallon container may consume a pint of water a day (Diver and Greer 2001). The amount of water a nursery will need depends on many factors including climate, type of nursery, irrigation system used, size of the nursery, container volumes, and types of crops. The two most commonly used water systems are overhead and drip types. Overhead watering systems, also referred to as sprinkler systems, are inefficient and raise concerns about surface discharge, and potential for ground and surface water pollution. These concerns have led to development of new drip and/or trickle technologies (USDA 1995). Two other types of irrigation system technologies that have emerged are subirrigation and pulse.

Drip irrigation systems are more expensive than overhead types and are higher in maintenance, but have the advantage of application uniformity. Drip systems are affected less by wind and large crop canopies, have less runoff, and workers can continue working during irrigation. In the past, a container nursery using an overhead irrigation system could use between $\pm 15,000$ and $\pm 40,000$ gallons of water per acre per day depending on the crop type. The advent of drip and trickle irrigation systems have reduced that consumption by up to 70%, reducing water use to between $\pm 4,500$ and $\pm 12,000$ gallons per acre (Diver and Greer 2001).

Subirrigation systems use capillary sandbeds to water plants. In a subirrigation system, water rises into containerized plants through capillary action. Water is released at the high end and slowly percolates to the low end. These systems incur the greatest installment costs, but they have no runoff or leaching. In a pulse system, instead of applying one heavy watering daily, a small amount of water is applied five or six times during the day. Very little water escapes from the container or runs off from the field. The production advantage to this is that less fertilizer has to be applied, because there is less leaching. Most nurseries that use this system use a computer to control water flow, since watering plants repeatedly by hand would cause a huge increase in labor expenses (Diver and Greer 2001).

In 2001, there were 41 nurseries in Placer County on an estimated 208 acres of land. This analysis assumes all 208 acres are dedicated to plant production either in fields or in greenhouses. Using these estimates, 208 acres of cultivated nursery land would use between $\pm 936,000$ and $\pm 2,496,000$ gallons of water per day. Water districts measure water in terms of acre-feet. An acre-foot of water is the volume of water necessary to cover one acre to a depth of one foot. One acre equals 43,560 square feet, so 1 acre-foot equals 43,560 cubic feet of water, which is approximately 325,851 gallons. Therefore, in 2001, nursery land use consumed between ± 2.87 and ± 7.66 acre-feet of water per day, and between $\pm 1,048.45$ and $\pm 2,795.90$ acrefeet annually.

At build out in 2020, the additional ± 156 acres of cultivated nursery development will increase water demand by between $\pm 702,000$ and $\pm 1,872,000$ gallons per day, which is between ± 2.15 and ± 5.74 acre-feet of additional water demand per day, and between ± 784.75 and $\pm 2,095.10$ acrefeet per year.

Table 11.1
Placer County Estimated Maximum Annual Nursery Water Use

Year	2001	2020	Total Increase
Estimated Annual Water Use (Acre-feet)	2,795.90	4,891.00	+2,095.10

Source: Diver and Greer 2001.

Water Sources

The source of water used by a nursery development depends its location in the county. Four (4) public water districts provide most of the farm irrigation water throughout Placer County:

- Placer County Water Agency (PCWA)
- Nevada Irrigation District (NID)
- South Sutter Water District
- Camp Far West Irrigation District

PCWA provides service in much of Placer County. Urbanized areas may have developed their own water supply. For example, the City of Roseville has its own water treatment facilities and appropriates its water from Folsom Lake. The San Juan Suburban Water District and Citrus Heights Water District serve urban water customers in western Placer County, these water agencies do not provide water for agriculture in the county (NFA/ARS 2002).

In some instances, a rural location may not have water facilities available and the water and wastewater treatment capacities would have to be developed onsite. Depending on the location, well drilling and septic system development may be necessary. The Placer County Department of Environmental Health reviews all water and/or septic systems for compliance with the California Clean Drinking Water Act and Placer County Code Section 16.08(e) (5).

Placer County Water Agency

The Water Division of PCWA operates nine water treatment plants, eleven reservoirs, five dams, 22 storage tanks, three wells, and a 385-mile network of pipelines and canals. PCWA supplies water to approximately 150,000 people in Placer County via residential connections,

and serves about 35,000 agricultural, municipal, and industrial connections. The main sources of water for the PCWA are the Yuba and Bear Rivers. This supply comes from Lake Spaulding and is purchased from the Pacific Gas and Electric Company (PG&E). The American River provides a second source from appropriated water rights developed through construction of the Middle Fork Project. The United States Bureau of Reclamation Central Valley Project (CVP) provides a third source of water to the Agency, and water wells provide a fourth water source (Placer County Economic Profile 2003).

Total PCWA treated water production in 1999 was 26,416 acre-feet (ac-ft) of water. Projections for 2005 show an excess supply of 48,300 ac-ft. By 2020, projections show a significant increase in demand, resulting in a reduced excess of supply. However, excess supply of 18,900 ac-ft is still projected. The District consists of five service Zones. Zone 1 is the largest of the five extending from the City of Auburn south to the northern boundary of the City of Roseville. Canals and three treatment plants serve Zone 1. Zone 2 is located in western Placer County south of the City of Roseville and consists of two wells serving 47 residential customers. Zone 3 is the second largest zone and serves the rural areas and communities north of Auburn to Alta. Zone 4 is located in the Martis Valley in eastern Placer County and serves 479 residential customers using two wells and a 500,000-gallon storage tank. Zone 5 serves 17,000 acre-feet of raw water to commercial agricultural customers in the Auburn Ravine area. *Tables 11.2* through 11.5 detail supply and demand for each of the Zones in the District. PCWA data combine supply and demand for Zones 1 and 5.

Table 11.2

Zones 1 and 5 Projected Water Supply and Demand Comparison^a

	Projected Annual Amounts of Water (acre-feet)				e-feet)
	2000	2005	2010	2015	2020
Supply					
PG&E ^b	100,400	100,400	100,400	100,400	100,400
Middle Fork American River	120,000	120,000	120,000	120,000	120,000
Central Valley Project	35,000	35,000	35,000	35,000	35,000
Recycled water ^c	0	0	10,000	10,000	10,000
Subtotals	255,400	255,400	265,400	265,400	265,400
Demand					
PCWA	106,300	123,100	133,000	145,500	162,500
City of Roseville d	30,000	30,000	30,000	30,000	30,000
San Juan Water District d	25,000	25,000	25,000	25,000	25,000
Northridge Water District d	29,000	29,000	29,000	29,000	29,000
Subtotals	190,300	207,100	217,000	229,500	246,500
Surplus or (Deficit)	65,100	48,300	48,400	35,900	18,900

a Zones 1 and 5 are combined into a single table due to having a common water supply.

b Current contract amount is assumed beyond contract term of 2013.

c Assumed amount. Final evaluation of this supply will be completed at a future date.

d Full contract deliveries are shown. Refer to each supplier's Urban Water Management Plan for specific projected demands. Source: PCWA 2000

Table 11.3

Zone 2 Projected Water Supply and Demand Comparison

	Projected Annual Amounts of Water (acre-feet)				e-feet)
	2000	2005	2010	2015	2020
Supply					
Groundwater ^a	1,330	1,330	1,330	1,330	1,330
Demand					
PCWA	64	64	64	64	64
Surplus or (Deficit)	1,266	1,266	1,266	1,266	1,266

a Based on 75% of well capacity.

Table 11.4

Zone 3 Projected Water Supply and Demand Comparison

	Projected Annual Amounts of Water (acre-feet)				e-feet)
	2000	2005	2010	2015	2020
Supply					
PG&E supply ^a	25,000	25,000	25,000	25,000	25,000
Demand			<u>.</u>		
PCWA	7,340	7,670	7,740	7,820	7,900
Surplus or (Deficit)	17,660	17,330	17,260	17,180	17,100

a Current contract amount is assumed beyond contract term of 2013.

Table 11.5

Zone 4 Projected Water Supply and Demand Comparison

	Projected Annual Amounts of Water (acre-feet)			e-feet)	
	2000	2005	2010	2015	2020
Supply					
Groundwater ^a	1,815	1,815	1,815	1,815	1,815
Demand					
PCWA	821	1,057	1,108	1,108	1,108
Surplus or (Deficit)	495	758	707	707	707

a Based on 75% of well capacity.

Source: PCWA 2000

Nevada Irrigation District

NID supplies treated and raw (untreated) water for use in agricultural, urban, and environmental requirement (i.e., minimum pool levels and fish releases) water use sectors. Agricultural water use accounts for nearly 90 percent of the total water supply within NID's system. Treated water is supplied for all urban water uses, including commercial, residential, and municipal. Municipal users include the cities of Grass Valley and Nevada City, which receive bulk raw water from NID. Environmental water uses include requirements that NID maintain a minimum pool of 39,675 ac-ft in its reservoirs and release approximately 7,700 ac-ft annually to preserve fish habitat throughout the watershed.

NID relies on surface water for the provision of both treated and raw water. Water sources are separated into four categories: watershed runoff, carryover storage in surface reservoirs,

contract purchases, and recycled water. On average, 206,229 ac-ft of water is produced by runoff throughout the watershed, including snowmelt and rainfall. This volume of runoff is sufficient to provide power generation for PG&E as well as water supply for NID. In dry years, power generation is reduced to ensure sufficient water supply.

Carryover storage refers to the water remaining in NID storage reservoirs at the end of the normal irrigation season. On average, 118,588 ac-ft remain in the reservoirs at the end of September. Environmental needs and "dead storage" require a minimum carryover storage of 39,675 ac-ft, leaving 78,913 ac-ft of usable storage in an average year.

NID and PG&E have a long-standing agreement making 59,631 ac-ft of water available to NID through contract water purchases during a year of normal or above normal precipitation. In dry years, the maximum amount available for contract purchases is reduced to 23,591 ac-ft. This agreement expires in 2013, but NID staff does not foresee any major changes relative to present operations when this contract is renegotiated. The final water supply source, recycled water, consists of effluent from municipal wastewater treatment plants that is captured and mixed with surface waters.

NID maintains eight water treatment plants with an aggregate capacity of 32.4 million gallons per day (mgd). These plants supply treated water to approximately 16,500 connections (as of December 2000). Increases in urban water connections are expected to occur at 1.6% annually, which has been the growth rate for NID urban water connections over the last ten years. NID is planning various expansions to the existing water treatment plants to keep pace with increased demands. Proposed plant expansions would result in a 22 mgd increase in treated water supply by 2020.

Currently, NID total water supply far exceeds the demand. Projected treated water demand for 2000 was 11,364 acre-feet, while treated water supply from the eight treatment plants was approximately 36,295 ac-ft. Overall (treated and raw) water demand was projected to be 159,593 ac-ft, while overall water supply was projected to be 348,815 ac-ft. Both overall and considering treated water only, projected supply was more than twice the projected demand. During past dry water years (drought conditions), NID's supply has been reduced by approximately 15 percent. This reduction in supply has no significant effect on availability of water to NID customers, as the overall supply would still exceed the demand by approximately 130,000 ac-ft. Projected supply and demand through the year 2020 is shown in *Table 11.6*.

Table 11.6
NID Projected Water Supply and Demand
Totals Comparison (in acre-feet)

Totals	2000	2005	2010	2015	2020
Supply	348,815	336,800	336,600	337,000	337,400
Demand	159,593	161,524	163,965	166,484	169,490
Excess supply	189,222	174,676	172,635	170,516	167,910

Source: NID Urban Water Management Plan October 2001

South Sutter Water District

South Sutter Water District is considered a supplemental water district because it does not provide full service to land owners. Most of the District's customers are agriculture-based and utilize private, deep wells to obtain the bulk of their water. The District supplements growers' water as needed and it is divided among customers based on acreage of land owned. The District's water comes from Camp Far West Reservoir, which has a capacity of 104,000 acre-feet. There are approximately 45,000 acres of land within the service boundaries, with an average of 30,000 to 35,000 acres planted and irrigated per year (NFA/ARS 2002).

Camp Far West Irrigation District

Camp Far West Irrigation District is a small water district that was organized in 1924. The District's original purpose was supply water to customers in Yuba and Placer Counties on the north and south sides of the Bear River where well water contained high levels of alkali if drawn down too far.

The district serves $\pm 4,500$ acres, most of which are in Placer County. In 2002 the Camp Far West district had 10 active accounts. Historically, landowners in the District have grown walnuts, almonds, prunes, rice, pasture, winter and spring grains, and hay.

The District receives the first 13,000 ac-ft out of Camp Far West Reservoir; the remainder is then allocated to South Sutter Water District (NFA/ARS 2002).

Total Water Supply Capacity

Table 11.7 gives the 2001 and projected water supply, demand, and remaining water amounts for the four water districts serving agricultural land uses in Placer County.

Table 11.7
Placer County Projected Water Supply and Demand
Totals Comparison (in acre-feet)

	Total Supply (AF/yr)			
Water District	2001	2010	2020	
Placer County Water Agency	255,400	293,545	293,705	
Nevada Irrigation District	280,380	336,600	337,400	
South Sutter Water District	91,000	91,000 ¹	91,000 ¹	
Camp Far West Irrigation District	13,000	13,000 ¹	13,000 ¹	
Total Supply	639,780	734,145	735,105	
Consumption	366,037	493,877	529,212	
Remaining	273,743	240,268	205,893	

1 Assumes current service agreements continue.

Sources: NID Urban Water Management Plan October 2001, PCWA Urban Water

Management Plan December 2000.

Table 11.8 shows the percentage of raw and treated water supply allocated to agricultural user contracts by PCWA, NID, South Sutter Water District, and Camp Far West Irrigation District. The remaining water is for commercial, industrial, residential, and environmental uses. The

contracts allotted a water supply to agriculture that exceeded use and provides a surplus of water allocated for agriculture.

Table 11.8
Percentage of Water Supply in Agricultural Contracts

Water Supply	2001 Amount Allotted to Agriculture
Placer County Water Agency	74% ¹
Nevada Irrigation District	90%
South Sutter Water District	100%
Camp Far West Irrigation District	100%
Totals	545,338
Remaining	94,442

¹ Percentage of total water allocated to raw water customers in Zones 1 and 5 only.

11.1B Regulatory Framework Placer County General Plan

The goal of the *Placer County General Plan* related to water service and supply is to ensure the availability of an adequate and safe water supply and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply. Policies related to this goal include requiring proponents of new development to demonstrate the availability of a long-term, reliable water supply; requiring that all areas of the county rely on public water systems, although allowances for individual wells in rural and agricultural areas are made; encouraging water purveyors to require that all new water services be metered; promoting efficient water use and reduced water demand through use of water-conserving design, equipment, and landscaping; and promoting the use of reclaimed water.

Auburn/Bowman Community Plan

The water supply goal of the *Auburn/Bowman Community Plan* is also to provide an adequate, reliable, and safe water supply at a reasonable cost for plan area residents and businesses. Policies included in the Community Development Element related to water service and supply encourage the use of public water supplies for all new development, and encourage the continuing cooperation between water supply agencies in order to minimize costs of service and increase reliability of supply and treatment.

Foresthill General Plan

A majority of the Foresthill area is within the boundaries of the Foresthill Public Utility district, which provides water service to the area primarily from the Sugar Pine Dam project. The northern and eastern portions of the Plan area obtain water from individual wells. The Baker Ranch Water District serves a small portion of the Plan area. The Goal of the Foresthill General Plan related to utilities and service systems is to assure that service availability is consistent with the adopted land use plan and projected demand. The policy to support this goal relevant to the proposed Zoning Text Amendment requires that adequate services are available for proposed developments prior to project approval and encourages use of mitigation measures for new developments to reduce impacts on local services.

Granite Bay Community Plan

The water supply goal of the *Granite Bay Community Plan* is to provide an adequate quantity and quality of water to the residents of the plan area. Policies included in the plan to support this goal encourage the use of public water supplies for all new development, expansion of the San Juan Suburban Water District, and development of a water conservation landscape plan.

Horseshoe Bar/Penryn Community Plan

The water supply goals and policies of the *Horseshoe Bar/Penryn Community Plan* are contained in the Community Development Element of that plan. The goals in this section are to ensure that public services are available to new development prior to the creation of demand for more services and to minimize any growth-inducing effects of extension of services to new areas. Policies included in the Community Development Element related to water service and supply encourage the use of public water supplies for all new development, and ensuring that both public and private water supplies are safe and adequate for their intended use.

Meadow Vista Community Plan

Section 5 of the *Meadow Vista Community Plan* expresses the goals of ensuring the timely development of additional service capacity, ensuring that adopted facility and service standards are achieved and maintained, and ensuring the availability of an adequate and safe water supply. Policies adopted to support these goals include requiring that new development fund expansion of service systems; requiring proponents of new development to demonstrate the availability of a long-term, reliable water supply, including written certification from the applicable water agency that service will be provided to the project site; and promoting water conservation.

Dry Creek West Placer Community Plan

The water supply goal of the Dry Creek West Placer Community Plan is to provide a source of treated and untreated surface water for all future development, including agriculture, in the plan area. Policies that will help reach attainment of this goal include requiring that a new surface water sources be developed along with the first new residential development in the plan area, encouraging continued and increased agricultural activities by providing "reasonably priced" surface water for irrigation, monitoring area wells for quality and quantity, encouraging water conservation, identifying possible groundwater recharge areas and retaining them as valuable open space, and recommending that detained peak runoff or flood flows be used for aquifer crcharge.

11.1C Impacts

Significance Criteria

A water supply impact would be significant if any of the following conditions would result with implementation of the proposed project:

- Contamination of a public water supply;
- Substantial degradation or depletion of groundwater resources;
- Substantial interference with groundwater recharge;

- Encouragement of activities that result in the use of large amounts of water;
- Use of water in a wasteful manner;
- Unavailability of water supply to serve the project;
- Unavailability of infrastructure to serve the project; or
- Inadequacy of water volume and/or pressure to serve the project.

Impacts Determined To Be Less than Significant

Contamination, Depletion, or Waste of Water, or Inadequate Supplies and/or Infrastructure to Serve the Project. The Zoning Text Amendment does not include any specific development project and would not change the water regulations applicable to future nursery development. Approximately 156 acres of plant nurseries are expected to develop by 2020 under the proposed project. Any of the future anticipated development must comply with State and County water regulations before being permitted, and infrastructure must be available as directed by the Placer County General Plan Goal 4.C and Policy 4.C.1 before development can occur. The General Plan and Community Plans throughout the county include policies that encourage water conservation in future development projects (i.e., Auburn/Bowman Community Plan Policy D.b.3.1, and Placer County General Plan Policies 4.C. 6, 7, and 11).

Estimated water consumption by all nurseries in Placer County in 2020 is approximately $\pm 4,891.00$ acre-feet per year. This amounts to $\pm 0.9\%$ of total consumption, $\pm 0.8\%$ of agricultural consumption, and $\pm 2.4\%$ of the water surplus projected for 2020. The water consumption statistics associated with future nursery development do not exceed the capacity of the projected water supply in 2020.

Given that no specific development project is being proposed, and that county policies regulate the conservation and provision of water facilities infrastructure for any future development projects, and that the water demand associated with projected future nursery use does not exceed supply at buildout, the implementation of the proposed Zoning Text Amendment is expected to have a less than significant impact on water supply throughout Placer County.

11.1D Mitigation Measures

No mitigation is necessary as the impact is less than significant.

11. 2 ELECTRICITY

11.2A Setting

Agricultural Electricity Consumption

The State of California's agriculture industry is heavily dependent on the ability to transfer large amounts of water throughout the state for the purposes of irrigation. The transportation of water uses a considerable amount of electricity. In 2001, California's agricultural industry demand was 18,659 million kilowatt hours (mKh), or 7.4% of the state's total consumption of 253,614 kWh. Of total consumption in 2001, commercial consumption was 36.1%, industrial 20.6%, and residential, 30.0%. Other uses amounted to 5.9% of consumption. In 2000, crop production used 2,996 mKh of electricity, 1.1% of total demand. Overall electricity consumption

in California was down by 9.6% in 2001, as compared to 2000 (California Energy Commission 2003).

Electricity Supply

Electricity in Placer County is provided by the City of Roseville, Pacific Gas and Electric Company (PG&E) and Sierra Pacific Power Company. Hydroelectric stations are a primary generator of electricity for the region.

PG&E is a subsidiary of PG&E Corporation and maintains its headquarters in San Francisco. PG&E provides natural gas and electric service to approximately 13 million people, or nearly one in every twenty residents in its 70,000 square mile Northern and Central California service area. PG&E has a number of locally based economic development representatives to provide comprehensive services for new and expanding businesses facilities. PG&E economic development representatives team with the local economic development corporations in their service territory to provide these services. These representatives can discuss the energy efficiency program options available to help building owners and designers to make a new or retrofitted facility as energy efficient as possible.

Sierra Pacific Power Company is an investor-owned public utility company engaged primarily in the generation, purchase, transmission, distribution, and sale of electric energy. The company supplies power to approximately 308,000 customers residing in an area of 50,000 square miles in western, central, and northeastern parts of Nevada, and a portion of eastern California in the counties of Alpine, Placer, Nevada, Sierra, and Plumas. In mid-1996, Sierra Pacific Power Company completed development of the Pinon Pine Power Project, a state-of-theart "clean coal technology" generator providing power to 60,000 homes.

Energy Conservation

PG&E encourages energy conservation through the building design process. PG&E offers a rebate program for new buildings that are designed with energy efficient technologies, such as north-south orientation to take advantage of natural lighting and insulation beyond the minimum requirements to reduce the use of heating and cooling systems. PG&E does not currently operate any alternative energy programs (i.e., rebates for installation of solar power collectors).

Undergrounding

Undergrounding of new and existing power lines in the vicinity of new development activities is required in some areas as designated in the *Placer County General Plan* and some community plans, as indicated in *Placer County General Plan* Policy 4.A.4 and Implementation Program 4.5, as well as Policy III.C.3.a.12 of the *Auburn/Bowman Community Plan*. Any plans for future development in designated areas will be required to comply with this requirement.

11.2B Regulatory Framework Placer County General Plan

The *Placer County General Plan* includes the goals of ensuring that public facilities and service systems to serve new development are in place prior to creation of demand for the services, and ensuring that adopted service standards are met. Policies related to electricity and natural gas

applicable to the Zoning Text Amendment include requiring that service capacity expansions are completed prior to creation of increased demands and requiring that developers of new land uses fund their fair-share of costs for capacity expansions.

Community Plans

All six community plans considered in this EIR have goals and policies related to electricity and natural gas that are similar in language and intent to the *Placer County General Plan*. Therefore, individual goals and policies of these community plans are not identified here.

11.2C Impacts

Significance Criteria

An impact to utility services would be significant if any of the following conditions would result from implementation of the proposed project:

- Encouragement of activities that result in the use of large amounts of electricity or natural gas;
- Use of electricity or natural gas in a wasteful manner;
- Any projected demand for electricity or natural gas that exceeds the supply;
- Any unresolved difficulty with conveyance of electricity or natural gas to the project site; or
- Any physical prevention of the routine extension of utility services to the project site.

Impacts Determined to be Less than Significant

Activities that Use or Waste Large Amounts of Electricity, and/ or Exceed the Ability to Supply Electrical Service. The Zoning Text Amendment does not include a proposal for any specific development project but would change the regulations under which plant nurseries could develop in Placer County. Under the proposed project, approximately 156 acres of plant nurseries are expected to develop by 2020. This future nursery development must comply with State and County public facilities regulations before being permitted, and infrastructure must be available before development can occur, as directed by the Placer County General Plan (Policy 4.A.2). The County also has provisions in the General Plan requiring development to pay for the infrastructure needed to provide it with service (Policies 4.B.1, 2, and 3). Given the small amount of anticipated future development and the existing policies requiring that developers provide infrastructure to accommodate increased service demands, the implementation of the proposed project is expected to result in a less than significant impact to the provision of electricity throughout Placer County.

11.2D Mitigation Measures

No mitigation is necessary as the impact is less than significant.

11.3 SOLID WASTE

11.3A Setting

Solid waste collection for the unincorporated areas of Placer County is divided into six separate franchise areas. The Eastern Regional Landfill is the disposal site for solid waste collected from

the three franchise areas located in eastern Placer County, the Town of Truckee, the City of Colfax, and portions of El Dorado and Nevada Counties. This landfill ceased burying solid waste in 1994. A materials recovery facility (MRF) and transfer station are currently in operation on the site. Recyclable material is diverted from the waste stream at the MRF. Non-recyclable waste is transported to the Lockwood Landfill near Reno, Nevada.

The three franchise areas in western Placer County, and the communities of Roseville, Auburn, Loomis, Lincoln, and Rocklin, are serviced by the Western Regional Sanitary Landfill (WRSL) and the Western Placer Materials Recovery Facility (WPMRF). The landfill, owned by the Western Placer Waste Management Authority, began operation in 1979. The WPMRF began operation in late 1995. This landfill is located between Lincoln and Roseville. The cities of Auburn and Colfax and the Town of Loomis purchase the services of this solid waste facility.

The Auburn Placer Disposal Service currently provides solid waste collection services throughout western and central Placer County. Collected solid waste is transported to the WRSL and WPMRF. The company reports that they process over 100,000 tons of garbage and recyclable materials annually.

The current estimated life span for the WRSL is 2025. Western Placer Waste Management Authority has prepared an EIR for an application to increase the height and depth of the WRSL to increase the projected lifespan to 2052. This anticipated lifespan is based on growth projections for the County contained in the *Placer County General Plan*. The application process is ongoing—a notice of availability for the DEIR was circulated January 16, 2003 (http://www.sacbee.com/01-16-2003/classads/notices/legal_notices) and the EIR is currently under legal challenge.

Large scale composting is not allowed in Placer County except in at a recycling facility, which must be located in an area zoned industrial (Yeager pers. comm.). The California Integrated Waste Management Board is responsible for working with local enforcement agencies to implement the California Integrated Waste Management Act of 1989, commencing with Section 40000 of the Public Resources Code, which establishes standards for the handling of compost. The Act directs that prior to commencing operations, all compostable materials handling activities shall obtain a Compostable Materials Handling Facility Permit pursuant to the requirements of Title 27, California Code of Regulations, Division 2, Subdivision 1, Chapter 4, Subchapter 1 and Subchapter 3, Articles 1, 2, 3 and 3.1 (commencing with section 21450)

Exclusions from the composting requirements that apply to nurseries include the handling of green material, additives, amendments, compost, or chipped and ground material if 500 cubic yards or less is onsite at any one time, the compostable materials are generated onsite, and if no more than 1,000 cubic yards of materials are either sold or given away annually. Storage of bagged products from compostable material is an excluded activity provided that such bags are no greater than 5 cubic yards *Public Resources Code*, *Title 27, Section 17855*.

11.3B Regulatory Framework Placer County General Plan

The *Placer County General Plan* requires that the County ensure the safe and efficient disposal or recycling of solid waste generated in the county. Policies adopted to support this goal include requiring waste collection in all new urban and suburban development; promoting the use of recycling, composting, and environmentally safe transformation of wastes (i.e., waste-to-energy

facilities); and requiring compliance with the Placer County Integrated Waste Management Plan.

Community Plans

None of the six community plans specifically addressed in this EIR have any additional goals or policies related to solid waste collection and disposal. All six of these plans refer back to the *Placer County General Plan* for this topic.

11.3C Impacts

Significance Criteria

Impacts to solid waste would be considered significant if any of the following conditions would result with implementation of the proposed project:

- A breach of state or local standards relating to solid waste or litter control; or
- Generation of a volume which cannot safely be handled by existing service or accommodated at the landfill.

Impacts Determined to be Less than Significant

Activities that Violate Standards or Exceed Solid Waste Infrastructure Capacity. The proposed Zoning Text Amendment does not include any specific development project. Approximately 156 acres of new plant nurseries are expected to develop by 2020 under the proposed project. This small amount of development in relation to other existing and future land uses within Placer County is not expected to generate a significant amount of solid waste. All future nursery development must comply with the General Plan and the County Integrated Waste Management Plan (Policy 4.G.7). Given the limited scale of future development and the existing regulations regarding solid waste collection and disposal, the implementation of the proposed Zoning Text Amendment is expected to create less than significant impacts related to solid waste.

11.3D Mitigation Measures

No mitigation is necessary as the impact is less than significant.

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CHAPTER 12

HAZARDS AND HAZARDOUS MATERIALS

CHAPTER 12 HAZARDS AND HAZARDOUS MATERIALS

This chapter evaluates the risks to public health posed by the potential exposure of humans to hazardous materials resulting from the changes to land development regulations due to the proposed Zoning Text Amendment. As no specific development proposal has been made, this chapter generally considers the potential for use and release of hazardous materials associated with the development and operation of plant nurseries and identifies mitigation measures necessary to minimize the potential impacts.

12.1 SETTING

Plant nurseries use pesticides, herbicides, fertilizers, and equipment fuel onsite. The proposed Zoning Text Amendment would allow Plant Production Nurseries to be located within residential zone districts, as well as all other districts where crop production is an allowed use. Plant Production, Plus Nurseries would require issuance of use permit in most zone districts. The development of plant production activities in residential zones or near schools or other public facilities could expose sensitive populations to hazardous substances should any accidental releases occur. Through their substantial use of water, future plant nurseries could release hazardous substances into nearby waters as chemical residues are carried in water runoff from a site. The use of water could also create mosquito habitat, if any water was allowed to pool on or near a project site. This would represent a potential health hazard for adjacent land uses.

Depending on the location, fire hazards in the form of brush and dry grass may pose a fire hazard. The removal of existing vegetation during site development would reduce the risk of fire hazards. Plant nurseries also use machinery with internal combustion engines that emit exhaust and use fuels and lubricants. Exposure of people to toxic air contaminants was evaluated in Chapter 7 AIR QUALITY. Composting of green wastes produced on site is an allowed use at plant nurseries, but can emit odors. The Hazardous Materials Chapter of this EIR will evaluate the risks and identify mitigation measures that will minimize the risks.

12.2 REGULATORY FRAMEWORK

State Programs and Policies

Both the United States Environmental Protection Agency (EPA), and the Department of Pesticide Registration (DPR) must register a pesticide for it to be sold in California. The DPR is the lead agency for regulating the registration, sales, and use of pesticides in California.

According to the DPR, pesticides (and other chemicals) can be absorbed through skin and into the body and cause illness. Hand exposure contributes significantly to the overall hazard of handling pesticides. Protecting the skin is often the most difficult problem associated with pesticide use.

The DPR also administers the *Surface Water Protection Program* with the goal of characterizing pesticide residues, identifying contamination sources, determining the mechanisms of offsite movement of pesticides to surface water, and developing site-specific mitigation strategies. These activities are done primarily through surface water monitoring in consultation with other agencies and research into factors that lead to offsite movement.

The State Water Resources Control Board is the lead agency for coordinating and controlling water quality in California. The State Water Resources Control Board has policies and regulations governing the handling, storage and disposal of hazardous substances. Permits and/or other action by the State Water Resources Control Board or the applicable Regional Water Quality Control Board may be required if contamination of water or soils could occurs during the construction or operation of any future nursery development.

Certified Unified Program Agency

The Certified Unified Program Agency (CUPA) Program was passed by the legislature in 1995 (California Health and Safety Code, Division 20, Chapter 6.11). The program consolidates permitting, inspection, and enforcement activities in several hazardous materials and hazardous wastes program areas. The Placer County Department of Environmental Health, a division of the Department of Health Services, is the CUPA for Placer County and is responsible for implementing regulations regarding the use and disposal of hazardous materials.

Through the CUPA program, any future nursery project would have a single point of contact for permitting related to hazardous waste generation and onsite treatment regulation, underground storage tank permitting, above ground storage tank spill prevention, risk management prevention programs, hazardous materials storage permitting, and hazardous materials management plans and inventories required by the Uniform Fire Code (Cal CUPA Net 2003).

Depending on where a nursery operator intended to locate, the fire district would have policies and guidelines concerning the handling, storage, and disposal of hazardous substances in their respective jurisdictions. Individual nursery developments would have to comply with the rules of the Placer County CUPA and the fire district in which it was seeking to locate.

Pests

According to the University of California Cooperative Extension, pesticides are substances or mixtures of substances intended for controlling any form of life declared to be a pest. Included as pesticides are insecticides, herbicides, defoliants, fungicides, nematocides, and rodenticides. The definition of a pesticide is not limited to any particular kind of chemical or pest (Stimman 1994). It is likely that a plant nursery would use some or all of these types of pesticides.

Plant nurseries in Placer County are regulated by the *California Food and Agricultural Code (FAC)*, the *California Code of Regulations (CCR)*, and the *Placer County Code*. The Placer County Agricultural Commissioner is an enforcing officer of all laws, rules, and regulations relative to the prevention of the introduction into or the spread within the state of plant pests and as to such activities is under the supervision of the Secretary of Food and Agriculture. The Agricultural Commissioner inspects nurseries for pests that could be injurious to plants, and assists nursery operators with pest control problems. The Commissioner's office inspects incoming shipments of nursery stock, enforces plant quarantines, and inspects nursery stock for proper labeling and condition.

The Commissioner is also responsible for issuing shipping permits, nursery stock certificates, and other required certificates that facilitate movement of nursery stock in trade. The Commissioner is responsible for enforcing quarantine requirements for nursery stock imported

into the County and before nurseries are permitted to make shipments to other states or countries (California Department of Food and Agriculture 2003).

Nurseries must be licensed to operate by the California Secretary of Food and Agriculture and licenses are renewed on an annual basis. The applications are available from the Placer County Agricultural Commissioner's office or from the Pest Exclusion Branch of the Food and Agricultural Department in Sacramento. "Hazardous" materials, as defined in *Health and Safety Code Division 20, Chapter 6.95, Articles 1 & 2*, shall not be allowed on any premises in regulated quantities without notification to Placer County Department of Environmental Health.

Mosquitoes

The Placer County Mosquito Abatement District for western Placer County was formed without funding on June 18, 1996. The City of Lincoln passed a measure funding mosquito abatement services within the city limits in 1998, and in the summer of 2000 a successful mail-in election established district-wide funding through the approval of Measure M. In 2001 the Mosquito Abatement District opened offices in Lincoln. The District is a division of the Placer County Department of Environmental Health that handles any mosquito complaints, conducts surveillance of mosquito-borne disease, and documents sources of mosquito production. The objectives of the District's program are to control or eliminate existing mosquito breeding sources and to prevent new ones in order to protect public health and comfort. The District operates under Chapter 5, Section 2270 of the California Health and Safety Code.

Waste and Green Product Recycling

As stated in Chapter 11 Utilities and Service Systems, the California Integrated Waste Management Board is responsible for working with local enforcement agencies to implement the California Integrated Waste Management Act of 1989, which establishes standards for the handling of compost. The Act directs all compostable materials handling activities shall obtain a Compostable Materials Handling Facility Permit pursuant to the requirements of Title 27, California Code of Regulations, Division 2, Subdivision 1, Chapter 4, Subchapter 1 and Subchapter 3, Articles 1, 2, 3 and 3.1 (commencing with section 21450). However, small composting activities associated with plant nurseries may be exempted from the permit requirements if the composting is limited to the handling of materials generated onsite and no more than 500 cubic yards is onsite at any one time. Composting activities exempted from the permit requirements must use only green material, feedstock, additives, amendments, compost, or chipped and ground material, and no more than 1,000 cubic yards of materials may be sold or given away annually. Storage of bagged compost material is an excluded activity provided that such bags are no greater than 5 cubic yards (Public Resources Code, Title 27, Section 17855).

Composting of green waste is allowed at plant nurseries in Placer County only for the waste produced onsite. Large-scale composting facilities are not allowed at plant nurseries and are only permitted at recycling facilities in the Industrial (IN) district (Yeager pers. comm.).

Placer County General Plan

The Health and Safety section of the *Placer County General Plan* establishes goals and policies related to use of hazardous materials and fire risks. This section also establishes goals and policies related to other types of hazards, which are discussed in other chapters of this EIR (i.e., Chapter 9 Geology and Soils and Chapter 10 Hydrology and Water Quality). The

General Plan goals addressed in this chapter are to minimize the risk of loss of life, injury, and damage to property and watershed resources from unwanted fires, and to minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous material wastes. The policies adopted in order to attain the goal related to fire hazards includes ensuring that discretionary permits for new development in fire hazard areas be conditioned to include fire hazard reduction measures, and referring development proposals to the appropriate local fire agencies for review for compliance with state, county, and local fire district fire safety standards. The policies adopted to support the goal related to use of hazardous materials include requiring that applications for discretionary development projects that will generate hazardous wastes or utilize hazardous materials include detailed information on hazardous waste reduction, recycling, and storage; and requiring that any business that handles a hazardous material prepare a plan for emergency response to a release or threatened release of a hazardous material.

Auburn/Bowman Community Plan

The *Auburn/Bowman Community Plan* contains no goals or policies related to fire hazards, control of mosquito populations or other pests, or use of hazardous materials.

Foresthill General Plan

The Safety section of the *Foresthill General Plan* establishes the plan's goal of protecting the residents and visitors to the Foresthill area from loss of life and property damage related to unwanted fires. Policies that support attainment of this goal include ensuring that all proposed development complies with state and local fire safety standards, including provision of adequate water availability and emergency access routes, and maintaining strict enforcement of the Uniform Building Code. The *Foresthill General Plan* does not address the use, transport, storage, or potential release of hazardous materials.

Granite Bay Community Plan

The fire safety goal of the *Granite Bay Community Plan* is to protect the citizens of the plan area from loss of life, property damage, and damage to watershed resources resulting from unwanted fires. Policies that support this goal are the same as in the *Foresthill General Plan* — ensuring that all proposed development complies with state and local fire safety standards and maintaining strict enforcement of the Uniform Building Code. The *Granite Bay Community Plan* does not address risks associated with hazardous materials.

Horseshoe Bar/Penryn Community Plan

The Public Facilities and Services section of the Horseshoe Bar/Penryn Community Plan addresses fire protection and "vector" control (vectors are creatures which transmit diseases to humans), and the plan is silent on risks associated with hazardous materials. This plan establishes the general goal of ensuring that public services and facilities are available to serve the needs created by existing and new development, including fire protection and protection of public health. Specific policies related to fire protection include using development setbacks from slopes to minimize risk of damage from fires; requiring new development to contribute a fair-share proportion to the cost of new capital improvements necessary to project the fire district with the facilities and equipment needed; maintaining strict enforcement of the *Placer County Zoning Ordinance*, *Placer County Subdivision Ordinance*, and Uniform Building Code; and

ensuring that new development complies with state and local fire safety requirements. With respect to vector control, the plan establishes policies of using appropriate "biota-oriented" vector control management strategies, i.e., stocking ponds with minnows and/or mosquito fish; requiring mosquito control measures to be implemented in new development projects, and requiring that the environmental review process address issues related to mosquito control.

Meadow Vista Community Plan

The Public Facilities and Services section of the *Meadow Vista Community Plan* addresses fire protection, while the plan is silent on other issues discussed in this chapter. The goal of the plan relevant to fire protection is to protect residents and visitors to the plan area from injury, suffering, loss of life, property damage, and damage to watershed resources from fires. Policies that support this goal include maintaining the current minimum fire protection standard, encouraging the Placer Hills Fire Protection District to meet established response time goals, requiring new development to contribute to improvement costs necessary to maintain the fire protection district's ability to provide services to the community, reviewing all proposed developments for compliance with state and local fire safety standards, and encouraging modification of vegetation surrounding structures and developments to reduce fire fuel.

Dry Creek West Placer Community Plan

As above, the Public Services section of the *Dry Creek West Placer Community Plan* addresses fire safety, while the plan is silent on the other issues discussed in this chapter. The fire protection goal of the plan is to protect citizens of the plan area from loss of life, injury, property damage, and damage to watershed resources resulting from fires. Policies adopted in support of this goal include reviewing all development proposals for compliance with state and local fire safety standards; maintaining strict enforcement of the *Placer County Zoning Ordinance*, Uniform Building Code, and Uniform Fire Code; and requiring new development to fund a fair-share proportion of costs of new facilities and equipment for the local fire protection district to ensure that acceptable levels of fire protection are available to all of the plan area.

12.3 PROJECT IMPACTS

Significance Criteria

The following criteria have been established for evaluating the significance or potential significance of a project-related hazardous materials or hazardous waste impact per Appendix G of the CEQA Guidelines. An impact would be significant if any of the following conditions would result from implementation of the proposed project:

- Creation of a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emission of hazardous materials or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Creation of a significant hazard to the public or the environment due to the project site being located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5;

- © Creation of a safety hazard for people residing or working in the project area due to the project site being located within an airport land use plan or within the vicinity of a private airstrip;
- Impairment of implementation or physical interference with an adopted emergency response plan or emergency evacuation plan; or
- Exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impacts Determined to be Less than Significant:

Impairment of Implementation or Physical Interference with an Adopted Emergency Response Plan or Emergency Evacuation Plan. The proposed Zoning Text Amendment consists of a series of amendments to the existing Placer County Zoning Ordinance and does not include any specific nursery development projects. Under the proposed amendments, establishment of new Plant Nurseries, Retail and Plant Production, Plus Nurseries in any zone except the C2, C3, HS, and IN zones would require issuance of a use permit. The use permit process requires site-specific environmental review, which would provide for the implementation of site-specific mitigation measures as needed. For those future nursery projects not submit to issuance of a use permit, the Placer County General Plan and most community plans require that new development be evaluated for compliance with state and local fire safety standards, as well as other emergency response standards. This review would ensure that future development under the proposed Zoning Text Amendment would have no significant impacts on the implementation of any pertinent emergency plans.

Creation of a Significant Hazard to the Public or the Environment Due to the Project Site Being Located on a Site Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5. While no specific project is being proposed, it is estimated that approximately 156 acres of nursery land uses would develop under the proposed Zoning Text Amendment by the year 2020. According to the Department of Toxic Substances Control (DTSC), five "Cortese" toxic contamination sites exist in Placer County. Three of the sites are located in the Southern Pacific Railyards, one is in Meadow Vista and had remediation in 1994, and the last is located in Rocklin at a former lumberyard site and is in need of remediation. None of these sites is likely to develop with a nursery (DTSC 2003). Other sites of hazardous materials releases (i.e., leaking from an underground storage tank, fuel spills) exist throughout Placer County. The environmental review of future projects requiring issuance of a use permit would address the site-specific concerns related to such sites. Given the small scale of anticipated future development, any impacts related to the presence of hazardous materials at a project site are expected to remain less than significant.

Exposure of People or Structures to a Significant Risk of Loss, Injury or Death Involving Wildland Fires, Including where Wildlands are Adjacent to Urbanized Areas or Where Residences are Intermixed with Wildlands. Adoption and implementation of the proposed Zoning Text Amendment would change the provisions of the Zoning Ordinance related to the development of plant nurseries. In general, development of plant nurseries would entail the removal of existing vegetative matter at a project site and maintenance of plant nursery stock in its place. Removal of existing vegetation would minimize the risk of a wildland fire on or

adjacent to a plant nursery site, while plant nursery stock maintenance includes regular watering and pruning, which would minimize risk of fire at a nursery site. In addition, all development proposals are required to be reviewed by the local fire district to ensure adequate provision of emergency access to the site and compliance with all fire safety standards prior to issuance of building permits. Therefore, risks associated with wildland fires would be minimized and this impact would be less than significant.

Creation of A Safety Hazard for People Residing or Working in the Project Area Due to the Project Site Being Located Within an Airport Land Use Plan or Within the Vicinity of a Private Airstrip. The proposed Zoning Text Amendment would alter the land development requirements associated with plant nurseries and would have no impact on air traffic patterns or safety. As discussed in CHAPTER 8 NOISE, portions of the zone districts affected by the proposed Zoning Text Amendment are located in the vicinity of public and private airports/airstrips. The proposed Zoning Text Amendment will have no impact on the use of the airports/airstrips, nor will they have any impact on the exposure of existing or future residents to airport/airstrip safety hazards. The potential future development of plant nurseries could include development within areas influenced by a public or private airstrip, which could expose workers at the future plant nurseries to airport safety hazards. With respect to the density of employees across a project site, Plant Production Nurseries are similar to crop production land uses. The proposed Zoning Text Amendment would allow Plant Production Nurseries to be located in areas where crop production is currently permitted, thus resulting in a less than significant change in numbers of workers in airport influenced areas. The proposed Zoning Text Amendment would make no change in the permissibility of Plant Nurseries, Retail, which are allowed or permitted in commercial and industrial zones. Other than in the C2, C3, HS, and IN zones, Plant Production, Plus Nurseries will require a use permit, which will allow for implementation of mitigation measures if necessary. Therefore the proposed project would result in no significant change in the numbers of plant nursery employees exposed to airport/airstrip safety hazards.

Potentially Significant Impacts

Impact 12.1 Creation of a Significant Hazard to the Public or the Environment through the Transport, Use, or Disposal of Hazardous Materials, or Accidental Release of Hazardous Materials, Including Use and/or Accidental Release Within One-Quarter Mile of a School

Significance Before Mitigation	Potentially Significant	
Mitigation Measures	12.1a through 12.1d	
Significance After Mitigation	Less than Significant	

While the proposed Zoning Text Amendment does not include a specific development proposal, it would alter the regulations that govern the future development of plant nurseries. As discussed in Chapter 2 Project Description, it is likely that new nursery developments will develop in areas close to urbanized areas with adequate growing conditions. There is strong possibility that a nursery would locate within one-quarter mile of an existing or proposed school and within existing residential areas. The types of hazardous materials and hazard conditions that could occur at all types of plant nurseries during their development and operation include: fuel handling and storage; handling, use, and storage of pesticides and fertilizers; and opportunity for mosquito habitat to be established.

Fuels

Construction of any type of land use involves the use of construction equipment and fuel, and other hazardous materials such as paint and solvents. The potential for fuel spills or other releases of hazardous materials at a construction site is controlled though provisions of the grading and building permits, as specified in Mitigation Measure 12.1a.

During the daily operations of a plant nursery, fuel (above or below ground), lubricants, and cleaners can be expected in quantities needed to support the scale of the operation. Their use for nursery equipment, machinery and/or vehicles and the storage of these materials could result in a potentially significant impact on a site-specific basis. Implementation of the Zoning Text Amendment is not expected to substantially increase the risk associated with the storage handling and use of fuels and other lubricants as the majority of future plant nurseries will be subject to site-specific review by the Placer County land development departments. As discussed above the handling and storage of fuels and other hazardous materials for all projects (including those that do not require issuance of a use permit) are subject to the requirements of the California Health and Safety Code as implemented by the Placer County Department of Environmental Health. Implementation of Mitigation Measure 12.1b will ensure that these requirements are met and potential impacts related to use of fuel will be minimized.

Pesticides and Fertilizers

The amount and type of pesticides and fertilizers used at a future plant nursery will depend on the size and nature of the specific plant nursery. All nurseries must be licensed to operate through the California Department of Food and Agriculture. Amounts of hazardous materials including pesticides and fertilizers must be reported annually and notification of the Placer County Department of Environmental Health is required if the quantities present onsite are subject regulation. In addition, the County Agricultural Commissioner is required to conduct regular inspections of nurseries. As stated above, implementation of the Zoning Text Amendment is not expected to substantially increase the risk associated with the storage handling and use of hazardous materials as the majority of future plant nurseries will be subject to site-specific review by the Placer County land development departments. The operation of plant nurseries are regulated by the California Food and Agricultural Code, the California Health and Safety Code, and the Placer County Code as implemented by the Placer County Department of Environmental Health and the County Agricultural Commissioner's office. Implementation of Mitigation Measures 12.1b and 12.1c will ensure that use of hazardous materials at future plant nursery sites will not result in significant safety impacts to surrounding land uses.

Mosquitoes

Mosquitoes are found in a wide variety of standing water sources including creeks, fishponds, abandoned swimming pools, stagnant and polluted waters, ponds, snow pools, brackish water, horse troughs, and artificial containers. Nurseries could have standing water in containers or in depressions due to irrigation practices and some nurseries have ponds or birdbaths as landscape features. Mosquitoes spread disease and two significant viruses have recently been associated with mosquito bites in humans, West Nile Virus and Western Equine Encephalomyelitis. Mosquitoes are most active in Placer County in the summer and fall months. Proper maintenance of water features and the prevention of standing water is key to avoid larvae development. The Placer County Mosquito Abatement District, which currently

operates in the western portion of Placer County, also recommends the use of mosquito fish, which consume mosquito larvae, to control mosquito populations. Compliance with guidelines established by the District, as required by Mitigation Measure 12.1d, is expected to reduce potential impacts from mosquitoes due to plant nursery development to less than significant.

12.4 MITIGATION MEASURES

- <u>Creation of a Significant Hazard to the Public or the Environment through the Transport,</u>

 <u>Use, or Disposal of Hazardous Materials, or Accidental Release of Hazardous Materials, Including Use and/or Accidental Release Within One-Quarter Mile of a School</u>
- Mitigation Measure 12.1a: Site grading and clearing activities for development of plant nurseries will require the issuance of Grading Permits. Article 15.48.240 of the Placer County Code specifies the conditions under which grading permits may be issued. Specific to hazards and hazardous materials, the Director of Public Works is directed to impose any condition deemed necessary to protect the health, safety and welfare of the public, to prevent the creation of a hazard to public or private property.
- Mitigation Measure 12.1b: Each plant nursery shall prepare a chemical inventory to submit to the Placer County Environmental Health Department (the CUPA for Placer County) for underground storage tank (UST) permitting, above ground storage tank spill prevention, and to determine if a Hazardous Materials Business Plan (HMBP) is required. If a Hazardous Materials Business Plan is required, the plan shall address administering a risk management prevention program including Best Management Practices (BMP) for handling of hazardous materials and potential releases of hazardous materials from the site. It shall also include an inventory of all hazardous material and waste handled onsite, emergency response plans and procedures in the event of a reportable release or threatened release of a hazardous material, and training for all employees in safety procedures in the event of a release or threatened release of a hazardous material as required by the Uniform Fire Code.
- Mitigation Measure 12.1c: Each plant nursery shall remain in compliance at all times with the licensing, training requirements and applicable regulations administered by the Placer County Agricultural and Weights and Measures Department and the State of California, and Best Management Practices pertinent to transportation, handling, storage, and application of pesticides, herbicides, and fertilizers. Herbicides, fungicides, and pesticides may only be applied at a nursery site by licensed applicator in accordance with product labeling directions. Storage of chemicals on site is contingent upon approval by the Placer County Environmental Health Department and applicable fire district regulations.

The State Water Resources Control Board is the lead agency for coordinating and controlling water quality in California. The State Water Resources Control Board has policies and regulations governing the handling, storage and disposal of hazardous substances. Any permits and/or other action required by the State Water Resources Control Board or applicable Regional Water Quality Control Board will be obtained. (*This mitigation measure is also listed as 10.1c.*)

Mitigation Measure 12.1d: Each plant nursery shall follow the practices recommended by the Placer County Mosquito Abatement District to reduce the danger from mosquitoes that may occur at a nursery site. Nursery operators shall eliminate all standing water in containers and on the ground at the nursery site. Water shall be circulated and filtered in ponds and water troughs and supply cisterns. Surface bodies of water shall be constructed and maintained to reduce potential or actual mosquito breeding habitat. Biota-oriented management such as use of mosquito feeding fish are advocated.

CHAPTER 13

CEQA DISCUSSIONS

CHAPTER 13 CEQA DISCUSSIONS

13.1 GROWTH INDUCING EFFECTS OF THE PROPOSED PROJECT

The CEQA Guidelines require an EIR to evaluate indirect or secondary effects of a project, which may include growth-inducing effects. Section 15126.2(d) of the CEQA Guidelines states that a project could be considered growth inducing if it could "foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment."

This section of the EIR evaluates the extent to which growth could be induced, accelerated, intensified or shifted as a result of adopting the proposed Zoning Text Amendment using the framework for a discussion of these potential growth-inducing impacts established by the CEQA Guidelines. Specifically the following questions are considered:

- Would the project foster economic or population growth or the construction of additional housing?
- Would the project remove obstacles to population growth?
- Would the project tax existing community facilities?
- Would the project encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

In this case, the proposed project consists of revisions to the existing text of the *Placer County Zoning Ordinance*. The adoption of the proposed Zoning Text Amendment would have no direct impacts on the environment as no specific development projects are proposed at this time. All impacts of the adoption of the proposed zoning language would be indirect or secondary effects generated by the future plant nursery development as permitted under the proposed Zoning Ordinance text. Therefore, all of the preceding analysis in this EIR considers the potential growth-inducing impacts of the proposed project and no further analysis of indirect or secondary effects is necessary.

13.2 IRREVERSIBLE ENVIRONMENTAL CHANGES

The proposed Zoning Text Amendment does not include any specific development projects. Adoption of the proposed Zoning Ordinance language would not result in any direct environmental changes. Implementation of the proposed Zoning Text Amendment would govern the future development of plant nurseries within Placer County. The environmental changes associated with site-specific development have been evaluated at a programmatic level in this EIR. It is expected that nursery development in Placer County by 2020 would encompass approximately 156 acres regardless of the adoption or denial of the proposed amendments. The irreversible environmental changes associated with the proposed project relate to the change in zoning ordinance requirements regarding the location of new nurseries. Under the proposed text, some new nurseries could be located in residential zone districts, where potential land use incompatibilities could occur.

In the analysis of the preceding chapters the possible environmental effects associated with the development of nurseries are discussed. In general, the irreversible environmental changes

associated with nursery development under the proposed project relate to the establishment of agricultural and commercial land uses within residential zones. Under the current zoning ordinance, agricultural land uses are considered appropriate for locating within rural residential zones. Therefore the proposed designation of Plant Production Nurseries as allowed uses in the RA and RF zones would not result in significant environmental changes. Additionally, the proposed requirement that Plant Production Nurseries with growing areas greater than five acres in the RA and RF zones offers a level of protection to residents that is not currently available since the existing zoning ordinance does not establish any maximum size for crop production and other agricultural land uses. The proposed designation of Plant Production, Plus Nurseries as permitted with a Minor Use Permit in the RA and RF zones could result in land use incompatibilities related to the sales activities allowed at this type of nursery. However the completion of the use permit process would include subsequent environmental review and allow for implementation of site-specific mitigation measures to minimize any environmental changes.

13.3 CUMULATIVE IMPACTS OF THE PROPOSED PROJECT

The proposed Zoning Text Amendment describes the different types of nurseries and designates the locations in Placer County where individual projects may occur. While not specifically proposing development, the amendment is addressing the character and location of expected development. It is expected that approximately 31 additional nurseries will develop in Placer County by the year 2020. Eleven are less than one acre; 14 are between one and five acres, and eight are larger than five acres. The cumulative impacts of this development have been described throughout this EIR and form the basis of its analysis as a programmatic document.

CHAPTER 14

ALTERNATIVES

CHAPTER 14 PROJECT ALTERNATIVES

CEQA requires that an EIR describe a reasonable range of feasible alternatives to the project that could attain most of the basic project objectives and would avoid or substantially lessen the significant environmental impacts of the project. The CEQA Guidelines state that the EIR should briefly describe the rationale for selecting the alternatives to be discussed. The Guidelines also state that the evaluation of alternatives should include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. The discussion of alternatives shall also evaluate the "no-project" alternative. The purpose of the "no project" alternative is to allow decision makers to compare the impacts of approving the proposed project with not approving the project (Guidelines 15126.6 et seq.).

The proposed Zoning Text Amendment is not a development proposal, rather a change to existing policies regulating development. Section 15126.6(c)(3)(A) of the guidelines specifies that if the project is a revision of an existing plan or policy, that the alternatives discussion must compare the impacts of development under the proposed policy to the impacts of development under existing the policy.

14.1 SELECTION OF ALTERNATIVES FOR THE PLACER COUNTY PLANT NURSERY ZONING TEXT AMENDMENT

As required in CEQA Guidelines Section 15126.6, project alternatives selected for analysis are those alternatives capable of eliminating or reducing to a level of insignificance, one or more of the significant adverse environmental effects of the project as proposed. Alternatives were selected based on feasibility and ability to meet basic project objectives, but potential alternatives were not rejected based on their likelihood to slightly impede the attainment of the project objectives or their likelihood to be more costly than the proposed project.

Objectives of the Proposed Project

As stated in CHAPTER 2 PROJECT DESCRIPTION, the Placer County Planning Department has identified the following objectives for the Plant Nursery Zoning Text Amendment:

- 1) Provide expanded definitions of "plant nurseries," with a distinction between "plant production," "plant production, plus," and "retail" nurseries.
- 2) Allow Plant Production Nurseries to be located in the zone districts where crop production is a permitted use.
- 3) Require "Plant Production, Plus Nurseries" to comply with the requirements for Plant Nurseries, Retail, or to obtain a use permit in any zone where Plant Production Nurseries are permitted and Plant Nurseries, Retail are not permitted.
- 4) Require a use permit for Plant Production Nurseries in the Residential-Agricultural and Residential-Forest zone districts when the nursery stock growing area exceeds five acres.
- 5) Allow Plant Nurseries, Retail to be located in the General Commercial, Heavy Commercial, Highway Services, and Industrial zone districts.
- 6) Require use permits for Plant Nurseries, Retail located in the Forestry, Neighborhood Commercial, Office Professional, and Industrial Park zone districts.

7) Create parking standards for Plant Nurseries, Retail.

The alternatives included in this analysis were evaluated partly based on their ability to meet the basic intent of these objectives.

Impacts of the Proposed Project

The proposed project was found to have significant environmental impacts before implementation of mitigation measures in the following areas:

- Land Use
- Aesthetics
- Air Quality
- Noise

- Biological Resources
- Hydrology
- Hazards and Hazardous Materials

Impacts in all resource areas were found to be less than significant after implementation of mitigation measures included in the EIR. Therefore there are no Significant and Unavoidable impacts associated with the proposed Plant Nursery Zoning Text Amendment.

Alternatives Selected for Analysis

This discussion will focus on two alternatives to the proposed Zoning Text Amendment to Chapter 17 of the *Placer County Code*.

Alternative 1: "No Project" - no Zoning Text Amendment would be adopted and the current regulations regarding nursery location and development would remain the same as they are.

Alternative 2: Use Permit Requirement – would require project review and the issuance of a use permit for all nursery development in Placer County.

14.2 ALTERNATIVES ANALYSIS

Alternative 1: The "No Project" Alternative

This alternative is a "no action" alternative and would allow plant nurseries to develop pursuant to the current regulations of the Zoning Ordinance. It is expected that approximately 156 acres of new nursery development will occur in Placer County by 2020 under either the proposed project or Alternative 1.

The current definition of "Crop Production" found in section 17.04.030 of the Placer County Zoning Ordinance includes the production of "ornamental crops" and "flower fields," which are typical nursery products. The existing Zoning Ordinance contains no use permit requirements for these types of "Crop Production," which are allowed in the RA, RF, C1, C2, C3, CPD, HS, OP, RES, AP, BP, IN, INP, AE, F, FOR, O, and TPZ zones. A crop production land use is subject to the minimum lot sizes established by the district it is located in, but has no restrictions with respect to a maximum size.

The current zoning definition of "Plant Nurseries" includes "establishments engaged in the sale of such products (e.g. wholesale and retail nurseries)." The definition does not distinguish clearly between nurseries that are primarily growing and selling only plants from those

primarily growing and selling plants as well as accessory garden products. However, the current definition of plant nurseries specifies that this is a commercial land use, not an agricultural one. Plant nurseries are allowed uses in the C2, C3, HS, and IN districts, require a Minor Use Permit in the C1, INP, AE, F, and FOR zones, and require a Conditional Use Permit in the CPD zone.

The most substantial impacts of the proposed project are related to the development of new plant nurseries in the RA and RF zones. Currently crop production land uses are allowed in these zones. The proposed Zoning Text Amendment allowing Plant Production Nurseries in these zones is not expected to result in any significant impacts that could not be mitigated through implementation of standard Placer County land development regulations and conditions. However, allowing Plant Production, Plus Nurseries in these zones, even upon issuance of a use permit, could result in some significant impacts due to the sales activities allowed to occur at this type of nursery. The "no project" alternative would not permit accessory nursery product sales within these residential zones. Therefore this alternative would reduce some impacts of the proposed project, as summarized in *Table 14.1*. However, this alternative does not meet the project's goals of clarifying the definition of nursery production as crop production and recognizing nursery stock as a valuable segment of the county's agricultural economy.

Alternative 2: The Use Permit Alternative

This alternative would require amending the *Placer County Zoning Ordinance* to allow Plant Production Nurseries and Plant Production, Plus Nurseries in every zoning district, except the RS, RM, MT and W districts, subject to the approval of a use permit. This alternative includes no changes to the permissibility of Plant Nurseries, Retail. This alternative would adopt the same definitions of "Crop Production", "Greenhouses", "Plant Nurseries" (including the new section 17.56.165), and the parking standards proposed in the Zoning Text Amendment.

The distinction between the "Use Permit Alternative" and the proposed Zoning Text Amendment is that this alternative requires some level of discretion and a use permit for all Plant Production Nurseries and Plant Production, Plus Nurseries in all zoning districts other than RS, RM, MT, and W, regardless of size. The most substantial impacts of the proposed project are related to the development of new plant nurseries in the RA and RF zones. Alternative 2 requires that all such nurseries obtain a use permit. This discretionary approval will include project specific environmental review and allow for the implementation of mitigation measures to ensure that impacts remain less than significant. Therefore this alternative reduces impacts over the proposed project, as summarized in *Table 14.1*.

This alternative meets the project's goals of clarifying the definition of nursery production as crop production and recognizing nursery stock as a valuable segment of the county's agricultural economy. This alternative also meets the purpose of the project by allowing for Plant Production Nurseries with accessory uses in most zoning districts. It does not meet the project goal of allowing for Plant Production Nurseries without discretionary review as described above. This alternative allows for more discretion on each project and an opportunity to mitigate environmental issues or land use conflicts that could arise due to location specific conditions.

Table 14.1 Comparison of Impacts of Project Alternatives to Impacts of Proposed Project

Resource Area	Alternative 1 vs. Proposed Project	Alternative 2 vs. Proposed Project
Land Use	Lesser amount of potential impacts as Plant Production, Plus Nurseries would not be permitted in the RA and RF zones under this alternative.	Lesser amount of potential impact as Plant Production Nurseries of any size in the RA and RF zone would require a use permit under Alternative 2.
Aesthetics	No change in potential impacts as crop production land uses would be permitted in the RA, RF, and various commercial (CPD) zones under either the proposed project or this alternative.	Lesser amount of potential impact as Plant Production Nurseries of any size in the RA, RF and various commercial zones would be required under Alternative 2.
Air Quality	No change in potential impacts as crop production land uses (which generate similar amounts of toxic air contaminants as plant nurseries) would be permitted in RA and RF zones under this alternative and the same amount of plant nursery development is expected to occur under any alternative.	Lesser amount of potential impact as Plant Production Nurseries of any size in the RA and RF zone would require a use permit under Alternative 2. Issuance of a use permit would provide for site-specific environmental review and implementation of site-specific mitigation measures.
Noise	No change in potential impacts as land development is expected to occur in all zones under Alternative 1. The significant impact of the proposed project is related to construction generated noises. As land development is expected to continue, there would be no change in the amount of construction noise generated in the RA and RF zones.	No change in potential impacts as development of plant nurseries could still occur in the RA and RF zones, thus generating construction noises. The use permit process would not provide any greater ability to mitigate these noise sources than is currently available through the grading permit process.
Biological Resources	No change in potential impacts as land development is expected to occur in all zones under Alternative 1. Any land development has the potential to impact significant natural vegetation and special status species.	No change in potential impacts as the amount of development of plant nurseries is expected to remain the same between the proposed project and Alternative 2. Any land development has the potential to impact significant natural vegetation and special status species.
Hydrology	No change in potential impacts as the same amount of development of plant nurseries is expected to occur under Alternative 1 as under the proposed project. Use of pesticides and fertilizers as well as use of water by plant nurseries is not expected to change.	No change in potential impacts as the same amount of development of plant nurseries is expected to occur under Alternative 1 as under the proposed project. Use of pesticides and fertilizers as well as use of water by plant nurseries is not expected to change. The use permit process would not provide any greater ability to mitigate potential impacts than is currently available through required compliance with existing state and local regulations governing the use of pesticides and fertilizers and the amount of water runoff from a site proposed for development.

Resource Area	Alternative 1 vs. Proposed Project	Alternative 2 vs. Proposed Project
Hazards and Hazardous Materials	Lesser amount of potential impacts as the development of plant nurseries in proximity to schools and residential areas would decrease under Alternative 1 compared to the proposed project.	No change in potential impacts as the amount of development of plant nurseries is expected to remain the same between the proposed project and Alternative 2. The use permit process would not provide any greater ability to mitigate the use of hazardous materials than is currently provided by state and local regulations.

14.3 Environmentally Superior Alternative

As seen in the analysis in *Table 14.1*, Alternative 1 results in a reduction in impacts related to Land Use and to Hazards and Hazardous Materials, with no change in impacts in other resource areas. Alternative 2 results in a reduction in impacts related to Land Use, Aesthetics, and Air Quality, with no change in impacts in other resource areas. Therefore, Alternative 2 is the environmentally superior alternative. However, this alternative does not meet the intent of Project Objective 2 as defined above.

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CHAPTER 15

MMRP

CHAPTER 15 MITIGATION MONITORING AND REPORTING PROGRAM

15.1 INTRODUCTION

The CEQA Guidelines require that EIRs include a program for measuring and monitoring the success of mitigation measures included in the EIR. Placer County has adopted a standard mitigation monitoring program. This program incorporates the most frequently implemented mitigation measures into the Conditions of Approval and entitlement processes (identified below under "Placer County Standard Mitigation Monitoring Program").

The mitigation measures included in the Placer County Plant Nursery Zoning Text Amendment DEIR fall under the Placer County standard mitigation monitoring program as they are all tied to building and grading permits, existing state and local regulations, and subsequent environmental review.

15.2 PLACER COUNTY STANDARD MITIGATION MONITORING PROGRAM

This program requires that mitigation measures for discretionary projects, such as the Plant Nursery Zoning Text Amendment, be included in the conditions of approval for those projects. Compliance with conditions of approval is monitored by the County through a variety of permit processes, including:

- Development Review Committee Approval
- Improvement Plans Approval
- Improvements Construction Inspection
- Encroachment Permit
- Grading Permit Approval
- Building Permit Approval
- Certification of Occupancy

The listed permits and plans requiring County approval must be preceded by verification from County staff that certain conditions of approval and mitigation measures have been met. The issuance of any of the listed County approvals or permits shall serve as the necessary monitoring of the mitigation measures that serve as prerequisites for the listed approvals and permits as listed in this EIR. The list below includes those mitigation measures for the Plant Nursery Zoning Text Amendment that will be implemented through County staff verification of required approvals.

Land Use and Housing

Land Use Incompatibility

Mitigation Measure 4.1a and 4.1b

Aesthetics

Degradation of existing visual character of the site *Mitigation Measure 5.1a*

Increase in light and glare

Mitigation Measures 5.2a and 5.2b

Transportation and Circulation

No significant impacts to transportation and circulation are expected.

Air Quality

Exposure of people to toxic air contaminants *Mitigation Measures 7.1a and 7.1b*

Noise

Substantial temporary increases in ambient noise levels in the RA and RF zone districts Mitigation Measure 8.1a

Biological Resources

Disturbance of a significant natural vegetation type *Mitigation Measures 9.1a through 9.1c*

Adverse affects on a population or the critical habitat of rare or endangered plants or animals

Mitigation Measure 9.2a

Hydrology and Water Quality

Discharge into surface waters or other alterations of surface water quality due to runoff *Mitigation Measures 10.1a through 10.1c*

Utilities and Service Systems

No significant impacts to utilities and service systems are expected.

Hazards and Hazardous Materials

Creation of a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials, or accidental release of hazardous materials, including use and/or accidental release within one-quarter mile of a school

Mitigation Measures 12.1a through 12.1d

CHAPTER 16

REFERENCES

CHAPTER 16 REFERENCES

EIR PREPARERS

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PLACER COUNTY PLANT NURSERY ZONING TEXT AMENDMENT Appendix A

APPENDIX A

ZONING TEXT AMENDMENT Proposed Amendments, Excerpted Pages of the Placer County Zoning Ordinance